# Table 3

>Sequence 3512

AGGTACTAGGTTTTGGTTGGGTAGGAGAGACCAAAACCAGGGAAAAGCTT
AGAAATCCTTTATTGGGGTTTCTGCAGGAAATGCAAGGCAGGTCACAGTT
AACAGCTTATTATTGGCTAGTTTGAATAATTCCAGTGGGCCCTGGGGCAC
AGGTATCTAGTTGTCTGGTCCCAGCTCTGAGATGATTTANAACAGGGAAA
TACTGGCTTAGTGTGAGAGTGAGAAAAAGGAGCTGATTGTGGCTTTATA
CTTGGGATTCATTGGTATGTATATGAAAGACATATTCTCAGTGGAACCCC
TCACTAAGACTGCCCAGGAGGGGGCAATCTTTTTCCCAGGTCTGTAAGGC
CCCNCCCAGTACCTGCCCCGGCG

>Sequence 3513

>Sequence 3514

CCGGGCAGGTACCCTGGACTCATACCTGAAAGCAGTGTTCAACCTTAGCA
AAATCTCCAACCAGCGCATGAACAATTTTCTACATCACAACGACCTGGTT
TTCAAATTCAGCTCTCAAGGCCAAATCTTTTCTAAATTTAACCAAGAACT
TCATCAGTTCACAGAGAAAGTAATCCAGGACCGGAAGGAGCCTCTTAAGG
ATAAGCTAAAACAAGATACTACTCAGAAAAGGCGCTGGGATTTTCTGGAC
ATACTTTTGAGTGCCAAAAGCGAAAACACCAAAGATTTCTCTGAAGCAGA
TCTCCAGGCTGAAGTGAAAACGTTCATGTTTGCAGGACATGACACCACAT
CCAGTGCTATCTCCTGGATCCTTTACTGCTTGGCAAAGTACCT
>Sequence 3515

>Sequence 3517

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#### Table 3

>Sequence 3518

>Sequence 3519

AGGTACTITITITITITITITITITITITGCAGGTTGAATGCAGGGTTTTAT
TGAGTGGTGGAGGTGGTTCTCTGAAGGATGCAGAGCTGGAAGCGGG
GATGGCACGGGAAGATAATCTTCCTGCTGGGTGGCCAAACCTCTCCGACC
ACCCTCGGCTGAACTCCTCTCGGCGTTCAAATGTTCCTCTTCTCTTTC
TCTACTGTATCGTTTCACCATTCATCTGCTTGTCTGGGATGGTGAAGACA
ACTGTTTGCTCACTTGCTTGCGGATAGGTGATTGTCTCGCCGCTCAGCTA
TAGGCGATGGTCTCACCACTCGGTGATAGGCGATTGTCCCATTTAGGTCG
CCAAAATGTGCCTGGAATTGGTGGGTTCTTCGTCTCACTGACTTCAAGAA
TGAAGCCGCGGACACTCGCAGTGA

>Sequence 3520

>Sequence 3521

AGGTACTTAGAGTCCAATTTTCCTACCTTGGCTTGTGCATGAGGTTGCCT
GGTTGCCACGGTGCCTGCTTTTCTCCCTGTGTCACCTCCACTGCCTCCTG
AATAACAGTCTCAGGTTTGTCTATGGCCTCTGCAGGGAGCCGGGATTCCC
AGACAGAGCAAGCCCACTTAAAATCAGGGTGGGGACCGCCTCTTCCCTTC
TTTGGGCCCGGAGTTCCATACTTTCCACGCCAGGGCACCAGAGAAATCCC
AGAATGGGGGCTCCCCACAGTTTTGTTGAGGAAAAACACATTTCAATCNT
GTTCCCAAAACCCTCAAAAGAAATGGAACTTCAGAAGGACCACCAAAAAG
AAACAAATGGGAAGGAAGAAAATTTTTAAATGGTTGGAATTCGTGGCA
AGGAAATGGTGGTTTCTTGGGTAAGGGCAGGACTCCCCGGCGTTACCC
CTGGCCCCGGGGCAGGCCCGGGGCTCCTAGTAA
>Sequence 3522

TTTCAACCAAAACAGCACAGAGGATTCATTTTGTCGGACTTCAACTAGTG

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#### Table 3

TCCCAAGAAAATACTAAGGCGNTGGCAGTTNCAATTAGGAAAATATCAG GAAGAACGAACGAAAGGGGCTTTCAATTNNATCAGGGCATTTTTTTGCGG GGGGCCAGTTGGTGTCTTATGGAAAACCAACCCCCAAGNTTTTGTTGGG AGGAAAAAAATAAAT

>Sequence 3523

CCGGGCAGGTACCAAGAAAACTCCATCCACAAGTCCTTGCTGAATAATCA
ATCGCTGAGCCTCATCTCTAGAAATTTTGTGGTGAAACCATGGCTGGGAC
CGGTGGATAGCCATGTTTGTGGCAGAGCTCTGTGAAGAGGCAGTGGGGCT
ACCGTGAGTGCCCAGGCCCGTAAACATTCCTTTTTTTCCTCCAAGCGAGT
TCCTTCTTCAAACCGCAACTGAAAGGGGCTTCAGGTGGGGAATTTTCTAT
ANACTCNNTGCTTTTCNNTGGCCTGAGAAAAGTCCATTGCNNTACCAGGG
AATNTNNCTCTGAGTATTACTTCCTCAATAGGGTTGATNNATGCTNCNNT
GTGAACTTNGCAGCCACTTTTCTAACCTNTTGATATGGNATGNCCNATAT
AATNNTCTGGTTCCTCGGGCCGGCTTCTAAGAAACTAGTTGGGAATCCCC
N

>Sequence 3524

TCACGTAGCTGAGACTTCTGGAGAGACCATTCAAGGCTTCTGGCTCTTGA CAAAGATAGACCACTGGAACAATGAGAAGGAGAGAATTCTACTGGTCACA GACAAGACTCTCTTGATCTGCAAATACGACTTCATCATGCTGAGTTGTGT GCAGCTGCAGCGGATTTCTTTGAGCGCTGGCTATCGCATCTGCCTGGGCA AGTTCACCTTCCCTGGGATGTCCCTGGACAAGAGACAAGGAGAAGGCCTT AGGATCTACTGGGGGAGTCCGGAGGAGCAGTCTCTTCTGTCCCGCTGGAA CCCATGGTCCACTGAAGTTCCTTATGCTACTTTCACTGAGCATCCTATGA AATACACCAGTGAGAAATTCCTTGAAATTTGCAAGTTGTCTGGGTTCATG

>Sequence 3525

>Sequence 3526

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#### Table 3

GTACCCCAGGCCTTTTTTGTTTCCCCCTTTTAAGG

>Sequence 3528

>Sequence 3529

>Sequence 3530

>Sequence 3531

>Sequence 3532

>Sequence 3533

CCGGGCAGGTACAGAAGGCCGGTCCTGACTTGGCTGGCTAGAGGAT
GAGGATGTCATCATTGAAGTGAATGGGGTGAATGTGCTAGATGAACCCTA
TGAGAAGGTGGTGGATAGAATCCAGAGCAGTGGGAAGAATGTCACACTTC
TAGCTCTGTGGAAAAAAAAGGGCTATTAATTATTTTCCCAAGCTAAAGAAA
ATTCCCTAATTTGTTTTCCTCCCCTGGCCTGATTCCACTTTGACATCCCC
TTTCAGTATTCCTAAATGAAGGGAATTAGTGGTTGGGATGTCAAAACCCA
TTGACTTCGCCACCATGGTCAAAAAGGAAACGTGTGCCCCACAGTTAACC
TTCGAGCCGCTTTCTAGCAACCTAGGTGTGATTCCCCCCCGGGGCTTGGC
AGGGAAATTTCGATTATCAAAGCCTTTATTTGCATTACCCGTCTGAACCC

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### Table 3

TTCGAGGGGGCG

>Sequence 3534

>Sequence 3535

>Sequence 3536

>Sequence 3537

CCGGGCAGGTACGCGGGGCTGCCTGGGGTGACCCATAAGGAACACCCCC
CCTTCTCAACAACACCACAGAAGATAAATGCCAAGGGGACCACCAACATGGG
CATGGGGCTGGATGCCAATCTTAAGGGAAAACACAAGTAAAATTGGCTCC
AGGACTGAGCTGGGGGCAGCTGCTCTTTCTGTCCATGACTTTGAGGCGGG
ATCTCGAGCGTCTGTCTGACGGGCCTTCTGTCTGCTCTCTCCCAGGT
TACAGACATTGAATCCAGGATTGCAGCCCTGAGGGCCGCAGGGCTCACGG
TGAAGCCCTCGGGAAAGCCCCGGAGGAAGTCAAACCTCCCGATATTTCTC
CCTCGAGTGGCTGGGAAACTTGGCGAGAGCCCAAATGCAGA
CCCTTCAAGTGAGGCCAAGGCAATGCTGTACCCTATCTTCTGAGAAGAA
AGTTCAGTAATTCCCTGAAAAAGTCAAGGTAAAGATGATGATTCTTTTTGAT
CGGAAATCAGTGTACCT

>Sequence 3538

>Sequence 3539

>Sequence 3540

>Sequence 3541

AGGTACCGTAGGGTTTTTAATACCAGGTTCACCACAAACACGAGTAATGT GTTGTCTGTGGAGTTATGACAGGTGGTAGAAAGTTCCCCGCTCTATTATA ATATTATGGGACCAGCTTGATACACAGCCATCCTTAACCAAAACATCATT ATGCTGCCATGACAACATTTGTTTGGTTTTGTTTGTTTTTTT

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### Table 3

AAGACCAGGTCTGGCCCTGTCGCCCAGGTTGGAGTGCAGGAAGAAAACTA
GGAGAGTATGGTGTCACCGAAGCCCAGGGAAAAGCGTTCCCGAAAGGGAG
CGGTCCACAGGACACATGAAGTTAGAGTATCCGGAGGATTGAGCAACATG
GAGATTGCTGCTCATCGCAACTACAGCAGTTGCAATTGAGTTAAGGACCT
GAACGCCAGACTACAGCGGAGGTGACAAGAAGTAAGAAAGTGAAGACTAA
AAATGTAAATAATTTCAGTTGTAATTGTGAAAGGAGAGTGATTCAAAGA
TAAGTTGAGGAAGAGGGAGCAAAGGCATTACTTCTTTGTTTCCCCTCC
CTCGCTTTACTTCCTAAGAGGAAGACAGGCACATTTAAAGGCTAAAG
AAGGTGAAAACTATTGAGACTAGATCACTAGTAGAGTGAAGTCCATCAAA
TAATAAAAGAGTGAGCTCTACAAAACAGGAAAAGACATNCTTGCCTTTGG
GGATTCGGGACAAAACAAGGGAGTTTTCCAGGGGTGAGGA
AAGTGAAGGGTTAAAATTGCCAAACAATCTTGCACCTATTAGCCTAGCCA
GGA

>Sequence 3542

AGGTACGCGGGGGGCTTTTTCTCTGAAAGCAAACGTGTGTCTTTTACACC AGGGCTTTCTCCCCACCCCAGGGGGTGTCTTCCATCCTTTTGTGGCTCAG TTGAAGGCGAAAAGGGCTCCAAACCACTAACTAACCAGAGGAGAGCCCCT TCTTCCACCTCCAGGGAGAATTTCAGATTTAATTTGTCCGAAGATAGCGT TTGGCTTCAAGATCCTGGGTAGAGGCTCACGGTCTTTTCAACCATCTTTG GCGAGGCCTTGCTTCCACTCGAGCCTGTTGACTGGGGCTGCTTTTA ACCCTTTCCTATTTGCTGAGAATGCAGCCGTGTGACAGTAACTGAACATT GGTCTAAAGTCTTTCCAAAAGGTCAAGGTTCACAAGAACATCTGCTCAAA TTAATGACCATGGGGGATATGAAGACCCCAGACTTTGATGACCTCCTGGC AGCATTTGACATCCCAGATATGGTCGATCCTAAAGCAGCTATTGAGTCTG GACACGATGACCATGAAGCCACATGAAGCAAAATGCTCACGGAGAGGAT GACTCCCACGCACCATCATCTTCTGATGTGGGTGTCAGCGTTATCGTCAA GAATGTTCCGAACATTGACTCTTCCAAGGCCGGGAGAAAGAGGGCACACC CCACTTGGCATGGCTACATAATGGGGTTCTACAAGATTCTCCCTTGACAG TCCAGTAAGATGAAGCAAATCCTTGAAAGGAAAGTGCCCGCTCTGAGGGA

>Sequence 3543

>Sequence 3544

GNGGCCATTGAGACTGCCATGGAAGACTTGAAAGGTCACGTAGCTGAGAC
TTCTGGAGAGACCATTCAAGGCTTCTGGCTCTTGACAAAGATAGACCACT
GGAACAATGAGAAGGAGAGAATTCTACTGGTCACAGACAAGACTCTCTTG
ATCTGCAAATACGACTTCATCATGCTGAGTTGTGTGCAGCTGCAGCGGAT
TCCTCTGAGCGCTGTCTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTG
GGATGTCCCTGGACAAGAGACAAGGAGAAAGGCCTTAGGATCTACTGGGGG
AGTCCGGAGGACAGTCTCTTCTGTCCCGCTGGAACCCATGGTCCACTGA
AGTTCCTTATGCTACTTTCACTGAGCATCCTATGAAATACACCAGTGAGA
AATTCCTTGAAATTTGCAAGTTGTCTGGGTTCATGTCTAAGCTTGTTCCA
GCTATCCAGAATGCCCACAAGAATTCAACTGGATCTGGAAGAGGAAAGAA
ACTGATGGCGTTAACTGAACCCATTTTGATTGAGACCTACACAGGGCTGA
TGTCATTCATTGGAAACCGCAACAACTTGGCTATTCCCTTGCCCGTGGG

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### Table 3

AGTATTGGGTTTTGAGAGTCTTTTTGGTCCCTC

>Sequence 3545

AGGTACTTTACTCACCCTTCCTCTGACAGAAAAGGATGAAGTCAAGGGCC
TGGTAGAGGCACCACTAAGAAAGGCATCTGAAAGGACCAAAGAGAGTGAC
CAGCAAGCATTTTTTGCAAGGCTGAGGAGCTGACAGCTTCCATGAAAGGC
TGGACCACCCAGTGGTGAAAAGCATCATCTGGGTTACCTTGTGCTGCCAT
AAAACACACCACAGACTTGGTGACTTAAACCACAGATATTTATCTTCTCA
CAATCCTGGAGGCTGGAAGTCTGCAATCACGGTGCCAGCATGGTCAGGTT
CTGGTGAGGGCCTCTTTCCTTCTCACTGTGCTCTTTTCTTGTGCATGA
GAGGGAGAGCATGAACAAGCCCTCTACTGTCCCTCTTAGAAGGGCACTAA
TCCCATAATAAGACATCCACCCTCCTGACCTCGGCTAACCCTAGTTAAGT
ACCTGCCCG

>Sequence 3546 >Sequence 3547

CCGGGCAGGTACTTTACTCACCCTTCCTCTGGCAGAAAAGGATGAAGTCA
AGGGCCTGGTAGAGGGCACCACTAAGAAAGGCATCTGAAAGGACCAAAGAG
AGTGACCAGCAAGCATTTTTTTGCAGGCTGAGGAGCTGACAGCTTCCATGA
AAGGCTGGACCACCCAGTGGTGAAAAGCATCATCTGGGTTACCTTGTGCT
GCCATAAAACACACCACAGACTTGGTGACTTAAACCACAGATATTTATCT
TCTCACAATCCTGGAGGCTGGAAGTCTGCAATCACGGTGCCAGCATGGTC
AGGTTCTGGTGAGGGCCTCTTTCCTTCTCACTGTTGTCCTCCTTCTTGTGC
ATGGAGAGAGAGAGGCTGAACAAGCCCTCTACTGTCCCTCTTAGAAGGGC
ACTAATCCCATAATAAGGCATACACCCTCCTGACCTCGGCTAACCCTAGT
TAAGTCCTCC

>Sequence 3548

CCGGGCAGGTACGCGGGGAGAACTTGTGTGCTTAGACCCGACGCTGGGAG GAGATGCTGCCACCTAGGTTACTTGTAGGACCCTATACGGCAACCTCCTT TGCCAGGAACTATTTATAAACATCCTGCAGGAAAATGAGTCTATATGTCA GAATACACATTTCCCACCTTGCCCAACAGTAGAAAAACATAAGAAGAGAA AAACATTAAAAAATGACAAGGAAGTTAATGGAAGTCAGCAATGTGATGGT GTTTGGAGGTGGAGCCTTCAGAAGGTAATTAATGCCCTTGTAAGAAGAGG CCAGAGAGCTTGCGCACCTTCTTCCTGCCATGTGAGGAGCCAAGAAGCCG GCTGTCTGCAACCTGCAAGAGGACCCTCACTAGAAGCTAGCCATACTGGC ATCCTCATCTTGGCTTTCCAACTTCCAGAACTGTGAGAAGTATATGTTTG TGGTTTAGTCAATGGTCTATGGTAATTTTTTATAGCAATCCCAGCCAAAA CAGAAACCCATGTTCAAATAAGAGATAGGATCCTGGAACACATTACACCT TCACTAGTTTTTAATATACAATATTGAGAAATAAGTTGTATTAACTATCT CATCCAAGAAATGCCGAATCATGTTGGTTCTAATTTTATTATAATTGA AAAAAAAAAAAACCCGGGGGTTTAAAAAAAAGGGGCCCCCGGGTTGGG

>Sequence 3549

CCGGGCAGGTACGCGGGAGAGAGATGCTGCCACCTAGGTTACTTGTAGGA CCCTATACGGCAACCTCCTTTGCCAGGAACTATGTATAAACATCCTGCAG GAAAATGAGTCTATATGTCAGAATACACATTTCCCACCTTGCCCAACAGT AGAAAAACATAAGAAGAGAAAAACATTAAAAAATGACAAGGAAGTTAATG GAAGTCAGCAATGTGATGGTGTTTGGAGGTGGAGCCTTCAGAAGGTAATT AATGCCCTTGTAAGAAGAGGCCAGAGAGGTTGCGCACCTTCTTCCTGCCA TGTGAGGAGCCAAGAAGCCGGCTGTCTGCAACCTGCAAGAGGACCCTCAC TAGAAGCTAGCCATACTGGCATCCTCATCTTGGCTTTCCAACTTCCAGAA CTGTGAGAAGTATATGTTTGTGGTTTAGTCAATGGTCTATGGTAATTTTT TTATAGCAGTCCCAGCCAAGACAGTGCCTCATTTACTACATACCATTTAT ATTATTATAAAGCTCCTTTCAAAAACCCATGTTCAAATAGGAGATTAGA AACTGAAACACATAACACCTTCACTAATTTTTAGTATACAAATATTGAGA

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#### Table 3

>Sequence 3550

CCGGGCAGGTACGCGGGCTTTGACCAAAGAGTGCTCTGACACACTGCATT CCCTTTCCCCTAGGGGTAGCCCATGTTGAGGGCAAGACCTCCAGAAATCC TGCAGCACCTCCGGGTCTTGACAGTTCCCCTGTAGTTGCCACGGTCTCAG TGGGTTCTACCGGGTTGTTTGCAGGAAATCAACTCACGTGGAGACATTAA GGGCTGAGATTCTCTGGGCAGAATGGCAGCACACAGGCGATAAAGTGCCC ACCTCCTCAGCTTGGGTTTGACGTGAGGGTGAATGAAACTTTGCGAACTG GCCTCCTGATGCTCTCCCAAGGACTCCTCAAATGGCCACCAGCAGCA GTTCCTGGGCTTGGGGGTGCAGAGGAGCTCACCACCATTTTGGCAGTCAG CAATCTGGGGCAGGTGGAAGGGGGGGCAAAGAAACACCCAACCTACTCTTT TCATGGGATTACAAGTTCCTCAGGGGGCATTAGCTTCCAAACTCTTGCTG CCTTCTTTTCTGCGCCCCAGATTCATCCCATGGGTTCTCTGACAGGTTC GGAAACTCTTCAGTATTCTACTCTGGCCATGATCATTTACCTGTAA CTTTGGTTTTTATTTCTGAAAAAGACCAGTAGCTAGTGTTTGCAGTCAAC CATTTTGGAAGCGAAAAAAAAAAAAAAAAAAAAAACCCTTCGCCCTTTAAA ACATGGGGACCCCCGGGCGGGGGGATTTTAATTAAATTTTTTTAACCCC CCCCCTTGGGGGGGGGGGCCCCCATTTTTTCTCCTTTAAGGGGGAATAT GCCCCCTGGGAAAC

>Sequence 3551

>Sequence 3552 AGGTACCACAACACTCACCAGGACTGGAGTGCCACCTATGACCTCATTGC GTAATGGATGGCTTGTCCTCAAATGGGCCCGGTCTTGGACGAGCCTGAGG ATGTCTACAAGTGGAAGAAAAGAAGCCACTGGAGCAGAAGGTGGGGAGGA TAAAATTTGGAGCAAGATTCTCAAGGAAGCAACAAGATCCTAAGGAAAGG AGAAAGAGACCACCTACTGCATTTCTGTCACTCGCTGAAAAGGACACTCT GTCAGAAAATCTTCTAGCAAACTTCAAAGGGCAAAATCACCCCTTGTTAC TGATAAAGCCCAGAGAGCTTCAGCAGCTAACATTCCCTGGACAGGGCACA GCAAGGATTTGAACCTAGGTCAGTCTGGCCAGAACACCCACAAGCTTTCC TTAACTCAGTGTGCTATCTCCCCACGACTAGGTCGCTACTGCTTTATAAT CACCTTTGTAGCCACCAGTGGATTTTGTTCATCAGTATTTTTCAGGCAAT TGATACTTTAGATATTCAGCTGCAAGACGTATGCAAGTTTCATTGACATC TTTTGGAGAAACTGACAAACCTGGACTTGATTTAATGCCTTTTGGACCCT TNCAGATTGTATATAACTCTAGATAGAAGGCTGGCCTNCATGATGTCAAG AATGTCGCATTCTTATTTTCCCATAGATTAACCCATTGTCCACAAAGTCA AAGAGTCAGGCAAAGCCCCTTGCATGGGGCTTTTTTGGAAAAGCAACAAG CCTGGACTTGGTCTACCACAGGGTTTGCTTAAGAAGTGTTTGACAGATTC **CTCAN** 

>Sequence 3553

CCGGGCAGGTACGCGGGGAGGAAGTGCAGACTGACATGGGAGAGCATGG CAGGCAAACTTAGCCTGTAAGGGTGGAGGTGCTGGAGAGACACTTCCTGC AGGAAGTGGCCTGTAGGCTGATACTTGAAGAATGGTTAGGAGTTAGGCAA TTGGGGTGGGAGGAGAAATGAAGCTGAGACAAAGAATAGCAAGGGCCA AAACCTAGAAACAAGAGACTGTAAGCTATAGCAAAGGAAGTGGGGTAATG

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# Table 3

>Sequence 3554

AGGTACTTTACTCACCCTTCCTCTGACAGAAAAGGATGAAGTCAAGGGCC
TGGTAGAGGCACCACTAAGAAAGGCATCTGAAAGGACCAAAGAGAGTGAC
CAGCAAACATTTTTTGCAAGGCTGAGGAGCTGACAGCTTCCATGAAAGGC
TGGACCACCCAGTGGTGAAAAGCATCATCTGGGTTACCTTGTGCTGCCAT
AAAACACACCACAGACTTGGTGACTTAAACCACAGATATTTATCTTCTCA
CAATCCTGGAGGCTGGAAGTCTGCAATCACGGTGCCAGCATGGTCAGGTT
CTGGTGAGGGCCTCTTTCCTCACTGTGTGCTCTTTCTTTTTGCATGGA
GAGAGAGAGCATGAACAAGCCCTCTACTGTCCCTCTTAGAAGGGCACTAA
TCCCATAATAAGGCATCCACCCTCCTGACCTCGGCTAACCCTAGTTAAGT
ACCTGCCCG

>Sequence 3556

AGGTACCTTGGTTTTCAGGTTATCTGACAAAGGCAGCTTTGATTGGGACA
TGGAGGCATGGCAGGTTCTCCTTTCTTTGGAAACACATCCATGCTGGGA
TGCACAGTTCTTTTCCTAAGGATTGTGTTTACTCCTGACTGCAACGTCTT
GGCCACTGTTTGGAGCAGTTTGGTCTGAAGGTCATTAAGGATCTGCTTGC
ATCTTGTTTCATGTCCTCCGTGACAGACTGCAGACCATGTTAGAAGAGAA
GGAAGGTTTGTGGATCAAGAGGGTTGACATTAGGTTTGGTGAGATGAGTT
GCTTGGCACAGATCAGCAGAACAGGACCCTGGTGATAAGGCATCTGGCTT
TGCTAACCACTTATCATCTTCCATTATTCTCTTTCTTAACTAAGTAGACC
CGAAAGTGCACTTTTGAAGTCTGGTTTTAGATGGCGAGATTCCGAATCTAC
AATGATCGAGTACCTGCCCG

>Sequence 3558

CCGGGCAGGTACTTTCACAGCAACATTTAGACTAGTGTTTGACCAACAAC
TGGGCACCACGGTCAAGCCAAGTTGGCATATAGAATTAGCCAGCAACAC
TGGGCACCACGGTCAAGCCAAGTTGGCATATAGAATTAGCCAGCAAACTT
GGTATTCACAATCTGTCATTATAGTCTTGTCTATAAACCTAAGGTTTAGA
GAAACGCTGGTCATTCTGAACAATTCCCTGTGAATGCAGAGATCAAGGAG
CCTCCCCTTAACTGGGTAGGCAGTGTGAAATACCTGCAGTGTGCTTGACC
TTACTGTTCACCCACTGGCAGCTGTTCCTACAGCTTTGGCTTCAGATATAT
AATATTACATTGGCTAACTTCAAAGAGCATTGTTTTCCAAGGATAGAGAT
GGTGATGGTGTATATTACTTTTACCAGCCCCAGACCTGTAAGAGGTTCTC

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### Table 3

ATCTCTTTTGGTTAAGATTTTGTTGTTTTTTTTTAATGCTCAATAAAAGA AGCTTTATTCTTTCATTAAAAAACAAATCTCAAAAGAACAGGGAAGAAGA GGGTAGCCTATGAAAGTGTGATTGTTATTTGATACCATCGTGACTTAGCT TGTTTTCACCTAAGACTCTGAGATTCTATTCTTGTTATGTGAGATTTGGG CTGAGTTCAACTACTATCCATATTAACTGAATAT

>Sequence 3559 >Sequence 3560

NAAGCGCGTATTGACACGCGATATCGACATACTATACGGCACGCGCGGAG GCGGCCGACGTACCAAATGAAGTGTGAAGACAATGCCATCCACCACTTTA GACAAACTGCAAAAATTGCCAAAATGCGACTTTCTAAAAATGGAGCAGA TGCAACAAGCAGATGAAGACTCTGAGAGGGGTTTGGAGTCTGGAAGCCTC ATCCCTTCAGCATCAAGCTGGAATGGGGAATGAAGAATACAGATGTGGTG CCCACTAAGCTACTGCTGAAAGGGAGCTGAAATTCCTCCACCAAGTTGGT ATTCAAAATATGTAATGACTGGTATGGCAAAAAGATTGGACTAAAGACAC TTGCCCATACCACTGGGACCGGGGTTATGTAAACCACCTGAATTGCCTGG GCCTTGAGAAAACCCCAAGGATGTCTTGGAAAAGGGACCNAATTGGGGGG TGGGTCCACGGCCTTGGGAATAAAATAATTCTTGAATGGATCCTGGAGGC CATTGGAACGGTAAAATTTGCTTATCACTTTTATGGGAATAATCAACTGG CCTGGTTTTTTTTTTATAAAACCATCCAAAACCTTCGTGAAATTTTAA AACCCTTTTTTGCAGGTGGCCCCTTCTTGAAGGTTTTTGCCTCCCTTGGG

GGTGGGCCTGGTTTGCCTTTATGGGCAACTTCATCCAAAACCTGGGGACA

CAAATTAAATTGGGCCTAATACCCCCAAGGGTTTATTTTCCACCTTCCAC **CTTTTCAAGN** 

>Sequence 3561

AGGTACGCGGGGGACCTTGGATGTGGAGGATTGCATTCAGTCTAGTTCCT GGTTGCCGGCTGAAATAACCTGAATTCAAGCCATGAAGAAGCAGCAATCT GTCTTCTGGATTAAAACTGAAGATCAACCTACTTTCAACTTACTAAGAAA GGTATTAAGCGCCTTTCTGAGAGCTCTCAGTGGGCTTCCTAAGCACGTTC TGTATCACTGCACAGAGATTCTACAAGTGGATATATAAAGCTAATAATGT TTTCAGTGAGCTCTTCTCTGGCAACTACTTTCCAAGTGCTTTCAGCATTC CACCTTGAAGCACAACGTTAATAATGCACAATTTCTTATGTTCAGCCACA GAATGTTCACGTGTGATTTGGTTACAACATATTGCTCTATCCAGGCCTCT AACAAACTGACTTCTTTCAAATGGACTTGCAGTTGCTGAATTCCAAATC AACACTTTATCTTATAAACAGAANANGACGGGAAGGGTGGAAGGAGGGGA ACAAGAGGGGCCTGNNCTNNNCNAGGGGCTTNAGCTAGGGGATAAGTT TTGGGAGGAAGTTAAAAAGGTTTTCCCTTGCCGGGGAAAAATNAAAANAA ATGAGATGTGTTGTATGAAATTTTATTTATGAGGAGTGGAGTTTAACATA AGTTGATATCTGTTTGTGGAAAAAGATATTATTAAGTTTGTAATTTGTTC TCAAAGAGCGGGGAGCAAAACAGCAGTATATACCTACATACGAAATAGAC >Sequence 3562

CGGCCTTGAGCCCTATTTGAATACTCAGGGCGAATTGGTTCTCCACCGCG GCGGCCGAGGTACTTTGTTACAGCAGCCTGAAAGGACTAAGACACCG ACCTAGTTTCCCTGATGAAAAAGTTTCTCTCAGACTTCTACCCTTTCCAA TGTGGCCAAAGCTTTTCATTCCGAAGAAGTTTCCTTTCTGAGAACACTCA TTGTGTCGTTTGGCTTTCCCCGTCTCTGCTTGACACATGAACCAAAACAG AGGCAGCCAAAGCAGGGAAAAAAAATCCTAGGATCAGAGTCCACTCTATG CC

AACAGCCATTTTATTTAATATCTCATGATTTTGTGGTCAGGAATGTGGAC AGAGCTCACCTGGGAGATTGTTCCACTCCATGTAGCATCAGAAGACAGGT CTCTTGGTGATATTCAGCTGGAGAATAAGTTAATATGCAGAGTTCAAGAT GGTTTCACTCACATTGACACCTTGGCAGGGATGGCTGGAGGGCTGGGCTC

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#### Table 3

ACCCAGATCAGTTAACTGGCGTGCCTGCATATGCACTCTCCACCATGGTG GTCTCTAGAATTGACTCAAATCTAGAATTGGCTGGAAGACATAGTGGGAG AAATAAACTTAGCAGCCACATTTAGTCTACCACATGGAGTAAGAGAGAAA GAAAGGAGTCAAAGGGGCCTAGTTTATTTCAATGTGATTTAAAATTGTGA CAACATAGAAATAACCAAAATATCCAACTGG

>Sequence 3564

CCGGGCAGGTACGCGGGGGTAGATGGAAGGAAGAACTTGTGTGCTTAGAC CTGACGCGGGGGAGGAGGTGCTGCCACCTAGGTTACTTGTAGGACCCTAT ACGGCAACCTCCTTTGCCAGGAACTATTTATAAACATCCTGCAGGAAAAT GAGTCTATATGTCAGAATACACATTTCCCACCTTGCCCAACAGTAGAAAA ACATATGAAGAGAAAAACATTAAAAAATGACAAGGAAGTTAATGGAAGTC CTTGTAAGAAGAGGCCAGAGAGCTTGCGCACCTTCTTCCTGCCATGTGAG GAGCCAAGAAGCCGGCTGTCTGCAACCTGCAAGAGGACCCTCACTAGAAG CTAGCCATACTGGCATCCTCATCTTGGCTTTCCAACTTCCAGAACTGTGA GAAGTATATGTTTGTGGTTTAGTCAATGGTCTATGGTAATTTTTTTATAG CAGTCCCAGCCAAGACAGTGCCTCATTTACTACATACCATTTATATTATT ATATAGGCTCCTTTCAAAAACCCATGGTCAAATAAGAAATTTGATTCCGA AACACATAACACCTTCACTAGTTTTTAGTATCCAAATTTGGAAAATAGTT GGTTATAACTATCCCATCCCAGAAATGCAAATTCATGGTGGTTCTAATCT TTATATATATGGGGGAATGGAGAAACCTACACCTTCCTAAATTTAGGGT GCCAAAAAAAAAAAAAAG

>Sequence 3565

>Sequence 3568

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### Table 3

>Sequence 3569

>Sequence 3570

>Sequence 3571

CCGGGCAGGTACTTTNTTTTTTTTTTTTTTTTTTTTTTAAGTGACAG AAAACAGGTTATACGTAACGTTAAAAATAATAAAATGGAAGACTATGCCT TCGGGGCTCATTTCTATAGTTTGTTGTTAGAAGAAGTTTCTCTGAACGTG TGGAGCACAGGGAAAAAATTGGTCTATAGGTTGTTGGGTTATAGACCCTT CCTTTTATATTCATATGTATTTATATGAGAATAAACATGACCCAAATATT CTACACTTAATATTTTGCAATCAGGAAAAAATGACTTGATAGAAGTATTT ACCCTGCCAGGCGTGGTGGCTCACACCTGTAATCCCAGCACTTTGGGAGG CCGAACCAGGAGGATCATCTGAGGACAGGAGTTCGAGGACAGCCTGGCCA ACATCATGAAACCCCATCTCTACCAAAAATACAAAAATTAGCCAGGCAT GGTGGTGCACACCTGTAATCCCAGCTACTCAAGAAGCTGAGGCAGGAAAA TTGTTTGAACCCAGGAGGCGGAGTGAGATCGCATCATTGCACTCCAGCCT GGGCGATAAGAGCGAATGCTCTGTCTCAAGAAAAATTAAAATTAA ATCCAGGTCAGGCGCGGGGGCTCACTCCTGTAATCCCAGCACTTTGGGAG GCCAAGGTGGGCACATCACGAGGTCAAAGAATCAAAACATTCTTGGCTAC ACGGGAAACCCCTTTTTTCTAAAATACAAAAATTTCCCCGGCGTAATGGT GGCCCCTGTAATCCAACTTTTCAGAAGCTTAGGCGNGAGATCT >Sequence 3572

CCGGGCAGGTACTGTTTTAGAAGGGATTACCAAAGGCTGGAGCAATTTA
AGCTATGCACTAGCCTTGCCCTCTTAGGTTGCATTCTCTTTAGGCCACTG
GTTCTCAAACATTAGGGTGCACTGTAACCATTACAGAGCTTGTGAAAAGT
GCAGAAACCTGAGCCTCACCTTATGAGATTCTGATTCAGCCAGGGGGAGG
ACAGGAATCTGTATTTTTCATAGCAACCTCAAGTAATCTTTATTCTGAGG
GTCTCGGGATTGCAGGTTGAAAAACACAACCTTAATCAGCAGTAAATTCT
TCTCTACTCGGCCAGGCGCAGTGGCTCACGCCTGTAATCCCAGCACTTTG
GGAGGCCGAGGTGGGTGGATCACAAGGTCAGGAGTTCGAGACCAGCCTGA
CCAACATGGTGAAACCCCATCTCTACTAAAAATACAAAAATTAGCCGGGC
GTGGTGGTGCTCGCCTGTAATCCCAGCTACCCAGGAGGCTGAGGCAAGAG

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## Table 3

AATCACTTGAACCCGGGAAGCAGGGGGTGCAGTAAGCCGAGATTGCACCA CTGCACTCCAGCCTAGGCGACAGAACGAGACTTTGTCTCANNGAAAAATA TGATCTGTGAAAGGAAGATTCTTTTCTACCCATTGGGCTTTAAACAATTC CCAGAAGGTGTTTCATTTTTAAAAAAAATATTATAGTAAATGAAAGCAATT TAGAGGGGGAAAATTCCTTAAAATGGAATATTTGCTTTTTTGACAATGAG AAAGTGACATGATTGGCTAAAGTCATCTTGAAA

>Sequence 3574

>Sequence 3575

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GCTCTCTCCATGCACAAGAAGAGCACACAGTGAGAAGGAAAGAGGCCC
TCACCAGAACCTGACCATGCTGGCACCGTGATTGCAGACTTCCAGCCTCC
AGGATTGTGAGAAGATAAATATCTGTGGTTTAAGTCACCAAGTCTTGTGGT
GTGTTTTATGGCAGCACAAGGTAACCCAGATGATGCTTTTCACCACTGGG
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CTTGCTGGTCACTCTCTTTGGTCCTTTCAGATGCC

>Sequence 3576

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TGCAGACACGGCTCTGAAAACAGTATGTGCCTTATGGGCATGATACGCCC
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GTACCTGCCCG

>Sequence 3577

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>Sequence 3578

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#### Table 3

CCATAAGCAGTTTCCCATGCACTGATCTAAAAGTGTCAGAAAACCATAAA GGATGTGTTTTGCCTGTGTCTCGTTAGAACAATGAGAAAAATGCCACTTTT AGAACTTGGAGGAGAAACAACACCCCTCCTTTGTCCACAGAGCGTAATCCAA AAGCTGTGGGAAGTGAGTGCCATTCAGAGTCCTCGTGCCAGGTCAGGTCC TTCGTGCTCCCCGTGGAGAGCACCCAGGATGTGAGCTCCCAGGTCATCCT AGAGAGCTCTGAAGTTAGAGAAGTGCAGTTGCCAACTTGTCACAGTAATG AACCTGAAGTGTCTCGTTGCAAGTTGTGCCCCCACAAGAGGAAGTACCCTGCCCGGCGGTAACNACGAAAAAAACATTCTAGAATTAGGAATCCGCATGGGGTATACCCTATAAAAGGCCCCGATCTTGGGTTCTTTAAAAATGAATTCCCAACCTGTTAATCTCTAAAAATCTTATATCCTTATTTCGCTATTGG AAAAATGTCTAATACTCTGGAATTGAGAATCCCGGTAATTTCCCTAATTGTAAAATGACATCTGGTAATCTCTAATATCTTAAAAATGACATCTTCGGTAATTTCCTTCTGGAAAATCACGGTAATTTCCCTCTGGGAAATGTCGGTAATCATAAAATGACCATCTTCGGTAATCTTTTTAAAAATTGAATCTTCGGTAATTTCCTTCTGGAAAACCTCGTATCTAAAAAATAGAGCATCTTCGTGAAAATCAACATCTTTTTA

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AGAGACGGGGAAAGCCAAACGACACAATGAGCGTTCTCAGAAAGGAAACT
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>Sequence 3580

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>Sequence 3581

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>Sequence 3582

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#### Table 3

### >Sequence 3583

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#### >Sequence 3584

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### >Sequence 3585

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#### Table 3

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>Sequence 3586

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ACTTCAGAATGCGCTTGTGGGTGAGGATGTACATGCCGGCTTCCCTTAAG
TTGATTAGATGGGAAACCAAACACCGTCTTTCAAGTGTGAGGCTGTGCCA
TGCTCCCTCAGGGAGGAGGGGCGCTGGGTCTGACCAGGTCTGCCTCTGCC
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GGTGAGCAGGACAGT

>Sequence 3587

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ATCTGCAAATACGACTTCATCATGCTGAGTTGTGTCAGCTGCAGCGGAT
TCCTCTGAGCGCTGTCTTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTG
GGATGTCCCTGGACAAGAGACAAGGAGAAGGCCTTAGGATCTACTGGGGG
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AGTTCCTTATGCTACTTTCACTGAGCATCCTATGAAATACACCAGTGAGA
AATTCCTTGAAATTTGCAAGTTGTCTGGGTTCATGTCTAAGCTTGTTCCA
ACTATCCAGAATGCCCACAAGAATTCAGCTGGATCTGGAAGAGGAAAGAC
ACTGATGGTGTTAACTGAACCGTTTTTGATTGAGACCTACACAGGGCTGA
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>Sequence 3588

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>Sequence 3589

>Sequence 3590

CCGGGCAGGTACTTTCATCCATAAAGGCCTGCAGCTGTTTCACTGATCCT TGCAGTTCATCCATCACCAACTCCATACAGTCAAAGACTTTGCTCTGGTT

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# Table 3

CTGTAATATTTTCTGGTAGTCAGGTTTTGTATTAAGAACTTCATTCTGAG
AAGACCCAAGATATGTCATAGGTTCCACTTTGACCTCAGTAATTTTGGCC
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CCTTCATCTCAGCCACAGATGCTTCCAAAGAAAAATCTGATGCTTTTCCA
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TGCAAAATGTTTAAATTCTTCAGAAAGAAAGATGCTTTGGCTCTAAAAC
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GCTAAATCGACCCTGATAGACCCGCTGAGCTCTGTGATGCCCTGGTGAAT
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AGGATTGCCTTCTTGTGTGATAACTGGCAGATTGTTCTTGAGGAGACCAA
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TTCCAGGGAGCAAG

>Sequence 3591

>Sequence 3592

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>Sequence 3593

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TCCCAGCAATCTTGAGCTTCAGGCCTGCACAGCTCGAAATAATTCCACTT
CGTCGTCCCCGAACGGCTTGTGGTCCTCCTTCCCAAACATGCTGAGGTAG
GCGGCCTTCATGTAAATGTAGGTGGCCTTTTTAAGTCAGATCATGTCAGT
TCCTTCTGGAAATCTGGTTATATTCCATCACACTCAGGAGACATCTCCTA
CAATTTCCTTGACACCTGCAGCACTCCCGCGTACCTGCCCG
>Sequence 3594

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ACATTAATGACTTCATAGTAAGAAACTGATTTCAAAGTGAATTAAGGAAA
TCATCACAGAGAATATTTTCAAACAGATGTTTCTCTTTTTTAAAAAGTGAT
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TAAAGGATTTTTAGCACCATGTAGATATTGTCTTTTTGTCCTTCAAAATTACC
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ACGGGGCTTAGGCTGTTGGAAAAAAAACCACTGGTCTGGTCAATTCCAAAC
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>Sequence 3595

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#### Table 3

AGGTACGCGGGGAGTCTAGTTCCTGGTTGCCGGCTGAAATAACCTGAATT
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ACCTACTTTCAACTTACTAAGAAGGTATTAAGCGCCTTTCTGAGAGCTCT
CAGTGGGCTTCCTAAGCACGTTCACTCTGCCTCCTTTAAGTCTTATATTT
ATGATCAAGATGAAAGGGAGGGATGTATCACTGCACAGAGATTCTACAAG
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CTTTCCAAGTGCTTTCAGCATTCCACCTTGAAGCACAACGTTAATAATGC
ACAATTTCTTATGTTCAGCCACAGAATGTTCACGTGTGATTTGGTTACAA
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>Sequence 3596

>Sequence 3597

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CGCTGGAACCCATGGTCCACTGAAGTTCCTTATGCTACTTTCACTGAGCA
TCCTATGAAATACACCAGTGAGAAATTCCTTGAAATTTGCAAGTTGTCTG
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>Sequence 3598

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CCACAGCAGTCGGTCAGTGTCCTCTTGAGCACCTCCTGAAGCTGCAGTGT
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>Sequence 3599

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>Sequence 3600

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### Table 3

GGCAGGCAAGAGACCCTGTGCAGGGAAATTCCTTCCCAGGCCACAGAAAT GGAAAAGCCAGACACGCTGAAAATGAACTCAGTCCTTCAGTTCTGGAGGC TGGAAGTCTGGNGTCAAGGTTGTGGCCAATCCTGTGTCTGGCAAGGCTGC TTCCTGGTTTGCAGACACCATCTTCCTCCCTGTCCTTCAGCCCACAGCAG TG

>Sequence 3601

>Sequence 3603

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>Sequence 3606

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>Sequence 3607

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### Table 3

>Sequence 3608

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>Sequence 3609

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TGCAGACACGGCTCTGAAAACAGTAATTGCTGCCTTATGGGCATGATACG
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ACAGTACCTGCCCG

>Sequence 3610

>Sequence 3611

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>Sequence 3612

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### Table 3

>Sequence 3614

>Sequence 3615

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TGTGTTTGAATCAGTTGCAATTTTTGTTTCTTGGCATTTTTAGCAGCCTATG
CTATACTATGAGAAATAGATATTTTTTAAAGGCACTTTTTTCAGCAGCTA
CCATTTTCCTAAAAGTTTTCAATCAGTAGTATTTCCATCAAAATGCTAAT
TATTGTTGTTGTTGTTGTTGATTAAAGACAGGGTCTCCCTCTGTCANCCCG
GCTGGAG

>Sequence 3616

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>Sequence 3617

>Sequence 3618

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#### Table 3

>Sequence 3619

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>Sequence 3620

AGGTACACAAAGACAAACCTGAACTTAATTTCAAGGAAAACTTAAACC CATGCACAAATAATTGGTGAGCCTTCATTTCCCTGACTTCAAGTTTCCAT GTGAGGACTCATGCTCTCCACTTTCTTCTTGGGAGGAGGGAAGATTTA CCTAATGGGTAAATTTGGGCAAAGCACATTGAGTGTGCTTGTTTGGCTCT GAGTCTCTTTGCAAACATGTGTCTGCCCACAGTGACATGAGTTTGCGTTG ACTGTCATGTCTGCAGGAAGCTGCCTGCTCCTGTGGCCATGTCAAGCAAT TCTTTCTTTCAACTGCAACTGTGTGTAAGAGCTTAGTCTGAGAAGAAATG TTCAGAAGCTCACTGTGGCTGCACATCTGAGCCATGTCTTCCCATTAGTT GTCATGAGTCAGCAATAAAGCGGGTATGTTGATGTCTATCAATCTAATTC CTATGTTCTGAACTCAGGGAAAGAAATATGAGAATCATTTGCAGCCTACC TTACCACAGCCCCACCAAGATGGCTTCATAATACTTGGAAAAATGTTTCC TACTTCCTTGACTTTTGAACTTTATATTTCTTCAACACACCCCCATGGT AACCAAAGGGAAGGCTGGAAGAAACTTAAAACAGGCCCGGGGCCGGTGG CTCACGCCTGGAATCCCGGCCCTTTGGGAGGCCCAGGCAAGCCTAACCAT AGGGTAGGAGAACCAGACCATTCTGGTTAACACAAGGAAACCCCGCTTTT TATTAATAAAAACTTACCTCCC

>Sequence 3621

AGGTACGCGGGGACCTAGGTTACTTGTAGGACCCTATACGGCAACCTCCT TTGCCAGGAACTATTTATAAACATCCTGCAGGAAAATGTGAAGTAGAAGA GACAGGGATATCCCAGAAGGTTATGCAAAACATCAAGAGAAGATGAGAGG AGTCTATATGTCAGAATACACATTTCCCACCTTGCCCAACAGTAGAAAAA CATAAGAAGAGAAAAACATTAAAAAATGACAAGGAAGTTAATGGAAGTCA TTGTAAGAAGACCAGAGAGCTTGCGCACCTTCTTCCTGCCATATGAGG AGCCAAGAAGCCGGCTGTCTGCAACCTGCAAGAGGACCCTCACTAGAAGC TAGCCATACTGGCATCCTCATCTTGGCTTTCCAACTTCCAGAACTGTGAG AAGTATATGTTTGTGGTTTAGTCAATGGTCTATGGTAATTTTTTTATAGC AGTCCCAGCCCAGACAGTGCCTCATTTACTACATACCATTTATATTATTA TATAGGCTCCTTTCAGAAACCCATGTTCAAATAAGAGATAAGATACTGAA GCACATAACACCTTCACTAGGTTTTAGTATACAAATATTGAGAAATGGTT GTTATTAACTATCTCATTCCAAAAATGCAGAATCAGGTGGTCCTAATTTT ATATATTGACAAAGGAAGAAACTTACACCATTCCTAATTTAGCTGCCC AAGAATGAAAGGATGAAAAATTT

>Sequence 3622

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#### Table 3

AGGTACTTTGTTACAGCAGCCTGAAAGGACTAAGACACCGACCTAGTCTC
CCTGATGAAAAAGTTTCTCTCAGACTTCTACCCTTTCCAATGTGGCCAAA
GCTTTTCATTCCGAAGAAGTTTCCTTTCTGAGAACACTCATTGTGTCGTT
TGGCTTTCCCCGTCTCTGCTTGACGCATGAACCAAAACAGAGGCAGCCAA
AGCAGGGAAAAAAAAATCCTAGGATCAGAGTCCACTCTATGCC
>Sequence 3624

AGGTACGCGGGGGCCGCTTTCTCTTACTGATAGTAGGATATTTCTGCTT TAGTTATTGTCACCTTAAATATATTTTCAATGTTGAAATCCTCACAGCAT GCTTGATGAAATCTAGTTTTCAAATTTTCTTAGGTATATTTCTGTCACGT TGGCATGATAACAAATGCAATAACCCAAAAGACCCCAAAAGCTAGTGTAA TCCCTTTTGCAATCCAAGCATGAGGATTCATCTTCATGTTGACAGTGCGT GAATGTTCGGTAGGCTTTGTCAAGCTTGCATACAATAAATTATATGTC CCTTTTCTTTTAGGGTCTCCTGTTAAAGATGGTCTTCTGAAGGCTAACTG CGGAATGAAAGTTTCTATTCCAACTAAAGCCTTAGAATTGATGGACATGC AAACTTTCAAAGCAGAGCCTCCCGAGAAGCCATCTGCCTTCGAGCCTGCC ATTGAAATGCAAAAGTCTGGTCCAAATAAAGCCTTGGGAATTGAAGAATG AACAAACTTTGAGAGCAGATGAGATACTCCCATCAGAATCCAAAAAAAGG GCTATTAAGAAAGGTCTTTGGATTCTGAGAGTCTTTGTGAGACTGTTTAC AGAAGGATGGGTGTTTACCCCAGGTTCACCTTAAAAGGAAATGGTTAAAA TAATTGGAAAATTAGAGAAGCTCCTGAAATGAGGGTTTTTTGAAGCTCCC TGCGCAAGAAAGTTTTAATTCACTAAGCCCTAAATTGGTGGCATGAAACT TTAAAGCAAGCCT

>Sequence 3625

CCGGGCAGGTACGCGGGGGAGAGGTGGATTTGAGAGATACCTCCCCTCC
TTCTGCTCAGCTGCCTTGCAGTAATTAAACTCTTTCTCTGCTGCAACACC
CCTACTGTTCTCCGTGTATTGCTTTTCTGGGCAGCAGAAAAAAGCTTGGC
CAGACCACAAGCGGGAATGCAAATGCCTTAAAAGCTGCAAACCCAGATAT
CCTCCAGACTCCGTTCGACTTCTTGGCAGAGTTGTCTTCAAACTTATGGA
TGGAGCACCTTCAGAATCAGAGAAGCTTTACTCATTTTATGATCTGGAGT
CAAATATTAACAAACTGACTGAAGATAAAAAAGAGGGCCTCAGGCAACTC
GTAATGACATTTTAACATTTCATGAGAGATGAAATACAGGATGCCTCTCA
GCTGCCACCTGCCTTTGACCTTATTGAAGCCTTTGCAAAAGTGATCTGCA
ACTCTTTCACCATCTGTAAATGCGGAAATGCAGGAAGTTGGTTTTGGA
TTGTGTTCAATATCTTTGCTCAATCACAGCTGTGACCCCAACTGTTCGA
TTGTGTTCAATGGGCCCCACCTCTTACTGCGAGCAAGCCGAGACATCAAG
GGGGAGAGGGGCTCACCATTTTGTTCCTGGATATGCTGATGACCAATGAG
GGGCGCCGGAAGCATTTGAGGGACCAGACCTTCTCCCTTTTT
>Sequence 3626

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#### Table 3

AGGTACAAGCTTACCTTTTAGGGTAGAAAAAGAAAGATCATTTGAAAAAT
GTATCTAAAATAATCCAGAGAACATAATGTTTGTCTTGGTCTGATAATGA
TAAGAAGTCAAGGATTGGCAGAGAAAATACTAAACGCCAAGAGTTGAGCC
TGTGGGTCTCTCCATAAGAGTTTTAAAACTCTTGCCAGTTACCACTTTAT
CCAATTTGCTATCATTTTCGTATTATCAGCTATCGCCCTGTAAAATATTC
AAAACTAGCTATTTCTAAAGTAAACATTTTATCTGTTACTTTTAACCAGA
TAGGTGTCTTTGTCATCCTTCTACTATAAATTGTTCTTTTGCCAACCTGTA
CCTGCCCG

>Sequence 473

>Sequence 474

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### Table 3

ACAAAAGAGAAGATATAAATTAACAATATTAAGAACAAAAAGAGACANGT GACTATGGCTTTTGGAGCCAT

>Sequence 475

>Sequence 476

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ATTATAATAGAAAGCCAGCCACTGCTTAGCTATCATAGTCACCATTTTCT
CACTGTTAACATTAGGAAAATCAAGGCTACTATGCTTCAGGATTGTCTGG
TTAAATAGTATGGGAAAAAAACTGAAGTTTCACATAATTACACACGTG
AAATAATTAAAGCTTAAACTGAATTTGTATTTCATTTTATTGTCAGATGG
TGGTGTTCACCAGCCTGTATCTTGTCTGAGACTGCATTCGTATCTGAGCA
GGTTTTCTATGCCTACTGATGTCAGTATGTTTATACTAACCTTCATGC

>Sequence 478

CCGGGCAGGTACATTCCAGGCAAAAACAGGGATCTCAAGGGGGGCAAGAA
GAACATTCTGGATAGCAAGCCCACTGCAAACAAGAAGTGCGACCTGATCA
GCATCCCCAAGAAAACCACAGACACGGCCAGTGTGCAAAATGAAGCCAAG
TTGGATGAGATTTTAAAAGAGATCAAATCTATAAAAGACACAATCTGCAA
TCAAGATGAGCGTATTTCCAAGTTAGAACAGCAGATGGCAAAGATAGCAG
CCTGAAGGTCCCACCCCCACCCCTACAGAAAAAATGGGAGCCAAGAACTTG
TGCTTGGGAGCTGTTATTGGTGTGTCCTAGGGAGGGCGGAAAGGAGG
CACTGCCATTTGGAGACATTCATTTCAGATTTGTCAACCAGCGATAGGC
CACATTCCAGTAAGAACTCAATTTGTCTCCCAAATTTGCAGAAACAAAAC
GTGATTTAAAAGCTGAGCTTTTTAACAGAAAGCTTTTTTAAG
TGTTATGTGACTTGTTGAACTTTTTAAAAAGTGCTACTTTTAAAATCCCA
GATACTCTGAATTTTAGAAAAACAAACTAATTCTGATTGTCCGAGCCCAA
GTACCT

>Sequence 479

AGGTACCAGAAACCCACCTCACCCGGCTCACATCTAAAGGGGCGGGGCC GTGGTCTGGTTCTGACTTTTGTGTTTTTTGTGCCCTCCTGGGGACCAGAATC TCCTTTCGGAATGAATGTTCATGGAAGAGGCTCCTCTGAGGGCAAGAGAC CTGTTTTAGTGCTGCATTCGACATGGAAAAGTCCTTTTTAACCTGTGCTTG CATGCTCCTTTCCTCCTCCTCACAATCCATCTCTTTTTTAAGTTGACA

> Page 425 of 685 of Table 3

#### Table 3

>Sequence 480

>Sequence 481

CCGGGCAGGTGGCAGCTCTGGCCCTGCTCTTTGCCATCCACAGCTACAAG CCAGCCCCTTCTTCGTCCTGGATGAGATTGATGCTGCCTTGGATAACAC CAACATTGGCAAGGTGGCAAATTACATCAAGGAGCAGTCGACTTGCAACT TCCAGGCCATCGTCATCTCTCCAAGGAGGAGTTCTACACCAAGGCCGAG AGCCTCATTGGAGTCTATCCTGAGCAAGGGGACTGTGTGATCAGCAAAGT CCTGACCTTCGACCTCACCAAATTTCCTGTTAATCGAAATTTAACCCGAA AGGCTGGATACCTTAATGCTAGGAATAAAACAGGCTTGGTGTCATCTACC TGGGACAGACAGTTTTACTTCACGCAGGGTTGGAATTTAATGAGTCAGGC CCCGTGGGGATGTAGCAGGAGGCCTGGCCATGGACATAGACAACTGTTCAG TGATGGCTGTGGACTGTGAAGACAGACGATATTTTCCAGTCACCTCT TTCGATGGAAAAAAAATCTTCAATTTTTGCAAGCAGAGAGTAAAAAAAGATCA

>Sequence 482

CCGGGCAGGTACAGAAGAGAGATGACGCCTCCGGCTGGGGAGGGGGC TGGCGCCTCTGAGAGAGCCCATTTATTATCAGGGTCACGGCCAAGACCGT GGGCTTGGTTTCTAGGTAGGTGGACTTTGAGGGGCAAAGACAACCCACTT TTCCTGCCCCCTACCCCCGGCTCTTAGAGACCATTTAAATCCATATCCAA AGTATATCCAGAGCCACCTGGGACCATCAGGCCTCTGGCTAGTCTTTCTG GGCCAAACCTGTCCTCCACCCTGAGGACCCTCAGGGAACCAGGAAGGTGA GGGGCTGGCTCCGCCCACCTGTAGCACAAGAGCTGGCCCAGGAGGAGGC TGAAGATGTTTTCTAGTTCCTGCATGCTGCTTTGTTGTGACCTCGGA CATGTCACCTCCAGCCTTCTTCACCCACCTCATCAACTAGGGCTAG TAATTGCCTGTGGTGGGTGGGCTGGGGGGCTCTGATGCCAAAATGCAGGT AGAAGACACACTGTGAGAGGCAAACGTCTTCACTCATCCTGCAGGAAAG GCCAAGTGAGCATCTGGGACCCATTCGAGCTGAATGACCCCCACCCCTTC ATCTGTGTCTATGGAGGGCAGTGCGTGTCCTCATCCTGGCGAGAAGGGA ATCTGATCCAAAGCCCT

>Sequence 483

CCGGGCAGGTACGCAAGCCTCTTCTCCCTTGATGTGGTAGCTACAGGC AGTTACATTCCTTTGCTGCTTGTGAGAAGCTTACATTTTGGCATTTTCTT CCAAAAATTACCACGTTGACCAAAGTAAACATTACAAGAATATGAACTTG TTATTGGGGGAAAGGGAAGTGAAGCAATCTGTAGAAAATATTTAACTGA AATTACAAACATAAGGACAAGCCTTTAAAGCAAATTATACAGGCATTTTT

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#### Table 3

GTCCTCTCTGGTCCCTGCAGTTAATTAACAGGGCCACAGATAATCTGA CATCTTTAGATAAAACAACTACACACCTATATTACTTAAGTTAAAGCCAG TAAGTTCAAAAAAAGCAATTACAACCATTTGACATGTTTTTCAT CTCTAACTCCTGATTTCCTAAATTACATTCAGTCATACAAACATGGCTGA ACAACAGCAAATGGGATCTGACTCTGGGATGTTTACTTCTTGGGATTAAA ATTCCCAAACACTTTGGTGTCTCTTTCTTGTGAATCTATACAACATTTCC AATAAATGTTTAATAATGATTTTTTAAAAGATATTGCCAAAAATGGCTCA GATTTAAGATGAAATAAAAACATAGCANACAAGCTATGGAAAAGTAGCCT ACATTTTGGGGCCCTGCAA

>Sequence 484

>Sequence 485

>Sequence 486

>Sequence 487

>Sequence 488

CCGGGCAGGTACCAAGCAAGAAGCTGGGGGGCTCCATGTTCACTGCCAAC

Page 427 of 685 of Table 3

#### Table 3

CCATGGATCTGTATATCAGGAGAATTGGGTGAGACGCAGATCATGCAGAT TCCCAGGAATGTGCTAGAGATGACCTTCGAGTGCCAGAACTTGGGGAAGC TTACTACTGTCCAGATTGGCCATGATAACTCTGGGCTGTATGCCAAATGG CTGGTGGAGTATGTGATGGTCAGGAATGAGATCACAGGACATACCTACAA GTTCCCGTGTGGCCGGTGGTTAGGGAAGGCATGGATGATGATGGAAGCCTGG AGCGATCCTAGTTGGGGAGCTGCTCACATCCCAGCCTGAGGTGGATGAG AGCCATGCCGGACCCCGCCGCTGCAGCAGTCCCCAGTGTCATCCGGAG GCTTTGACCATTCACCAACAACAAGCCCAAGCTGAACACTGGGCAGA TCCCGGAGTCCATCGGGAGGAGAACACCGAGGCAGATCCCGAGACCTTTCAT AAGCCTGAGAAAGAGCAGGCAGTCCGACCTTTTGTTGGAGAGGGT GGGCTTGTCTAG

>Sequence 489

>Sequence 490

>Sequence 491

AGĞTACTAGTAACATGGTGTGTATGATACACTAAAAAGTAAATGGACAAG
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CACCGGGTTTCTTGCCTAAGGTCCATGGTGACCACTCCTTGGCTATTGCC
AATGTTCACTCAAGGCCCAAGCACTCTTTATTCAGCTGGTGGCAAATCCA
GCCAGGCTTGTGTTTTTCCCTTCAGTATGACGAGCTCCCCCTAAGCCCAA
GACAAGTCCTAAAATGTCATCTGGGAGCCAGGACCTGGAATCAGAGTCCT
TAGGAATTTACTTGGTGCTGTATTCTACTATGGCTGAGCTGGCAATCAAA
GTGCAAGATTAAGCCCTTTATTTCTTTGGTCTCCTTTCCTCAAGCAGAT
GGATGCTTTTCCTGGGGTCACCGACACCCCCAGCCTTGAGGCAAGTACCT
GCCCGGGGCGGCCGTTTAAAACTGGGGGATCCCCCCGGCCTGAAGGAATT
TGATTTAAAGCTATTGGATC

>Sequence 492

GCGGGCTAAACGCGGTGTGGGACTTGTGGGCCAAGCAGGAGGGAAAGCCT GTCTGGAAGTTACGTGTGGACATGGGGGCCAGGACGCTGGTATCCTGCAT AGATTTCAGGTACCT

>Sequence 493

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# Table 3

TATAATTCAATACATGATCAAGTTAATTGGTAAATTTTATTGAAATTTA
AAACTTGCATTTTTATATATGTGTATGTGTACCT
>Sequence 494

>Sequence 495

AGGTACTGTTCTACCAACAGCTCTGATTTGGTGAGTGCATTTTCTACGCC
ACTGCTCACGAGCTGCATCATCCGACTCCCCAAGACTGTGTTAATGCTGC
CACTGACCACAGACTTGGTCTTCTCCACACTGCCAGTCACTGCCCCTTTG
GTCTTGTCCATCACCCCTGTGATCGTGCTGGCCACAGAATCCTTTGGCCCC
AGTCACAGTAGTCGTCACAGCATCTTTTGCCCCAGTCACAGCGCCTTTGG
CATTGGCAACAATCTGAGTTGATGGCTGATTCAGAATAGGCAGTCTCTCC
TCAATCCTGTCTTAGCCCCTTACAGGCATAGTTATTGGCAACTGCAATTT
GCGGCTCTAGCTTCTGGATGATGGCCAGAGCACTGGTCATGGCCACGGAG
GTGATGGTCTTCACACCGTTCTCTGCCATCTTACACACAGACTTCAAGTA
GGGATACTGGTCCTTTGTACCTGCCCC

>Sequence 497

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#### Table 3

Sequence 499

>Sequence 500

>Sequence 501

>Sequence 502

>Sequence 503

>Sequence 504

AGGTACATTCAGAATCCCACGAGCAATTCAGATAGACCAGTCACCAGGCC TCTAGCTAAAAGAGCACTGAAATACACAGAGGAAAAAGAGACGGAGGGTT CTAAGCCAACAAAAACTCCTACCACTACACCCCTGAAACTCAGCAGTCA CCTCATCTTAGCCTGAAGGATATCACCAATGTCTCCTTGTATCCTGTTGT

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### Table 3

>Sequence 505

AGGTACATGTATTTGTCACTTAAAAGGTTCTTTCTGTAAACTGCTTCAGAT
GCTTTTACTATTCAATTTTTAATGCTTAATATCTGTAAAGAACGTTAATA
TTCCTCTCTATAATCAATCTTTCCCAGTGTAGCCATAAAAATGTATTCCC
TACTTTTGCTTCAGGAGATCATTATTTGCAAATGCAAAAGATTTTTTACTT
AGACTTTTGAAATCACTCTTAGTAACTTTAACATTGCTTTTAGGTATGAA
ATTGAAGGCTGTGAAGTGATTTGGGCCATTAAAGATAAAGCTATAGGGAA
TACTTTCTTCTATGCAAGAGCAGATGAATTCTTGACTTCAAAGCTCATTG
CTGAAAAATCAGAGGCTAAAATTGCACATAAAAGAACCAGGTATACAACT
GAAGGGAGGGAAAATGAAGCTTGAAGCCAATCTAAAGCAGATTATGGAGG
GAGGGCATTGGGACCAGAATGGCCTGAAGCTTGAATCTTAAAGAACAAA
AGAGTTTTCTTATTAGATTCAGCCTTGAACTATGGTGGAGG
>Sequence 506

GGTACCTTGGT >Sequence 507

GCCGGGCAGGTACATAACATTTCAAATATAAGTGGAAGGATCATCAGTAG
TGTTATCAAAATGCATAGGACAGAGACTTTTTTAAGAAAGGATAAAAAATT
ACACTCAGGACCCATAACTCTTCCTCATTATAAGCATATGTAGTGATTCA
TTCATGCAGGTTTTTATATGTAGATAGGATTTTTTTTTCCTTTTCAAGAA
TTCCATTGTAGCCATGAGATGAAAAATGTATTATGGTAATGGTATAGCTT
TCTTCTATTTTGCTTTTAGTGTTAGGTTTGCTAAAAGCTTATTTAAAATT
CCCAATTGACATAATGTGTTTTCAATAAGGAGGACGCTGCCTACTCCGGG
AAGCCGGGGCCCGGTTCCCTGAGCAACCCTTGGTCGGTTTAAAAACAAGTG
G

>Sequence 508

CGCCTCCAGCCGTGTGCCGCTATGGGAGTCCCGGCGTTCTTCCGCTGGCT
CAGCCGCAAGTACCCGGCCATCATAGTCAACTGCGTGGAAGAGAAGCCAA
AAGAATGCAATGGTGTAAAGATTCCAGTTGATGCCAGTAAACCTAATCCA
AATGATGTGGAGTTTGATAATCTGTATTTGGATATGAATGGAATCATCCA
TCCCTGTACTCATCCTGAAGACAAACCAGCACCAAAAAATGAAGATGAAA
TGATGGTTGCAATTTTTGAGTACATTGACAGACTTTTCAGTATTGTAAGA
CCAAGAAGACTTCTACATGGCAATAGATGGAGTTGGCACCACGTGCTAA
AATGAACCAGCAGCGTTCAAGGAGGTTCAGGGCATCAAAAGAAGGATTGG
AAGCCGCAGTCGAGAAGCAGCAGTCAGGGAAGAAATATTGGCAAAAGGT
GGGTTTCTTCCTCCAGAGGAAATAAAGAAAGATTTGACAGCAACTGTATT
ACACCAAGAACTGAATTCATGGACAATCTTGCTAAATGCCTTTTGCTATTA
CG

>Sequence 509

CCGGGCAGGTCGCTTGGAACCTTTTGGGGATGTGACAGAGGAAGCAGC TCCGGGACAAGCTCCAGTGTAAAGACTTCAAGTGGTTCTTGGAGACTGTG

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### Table 3

>Sequence 510

>Sequence 511

>Sequence 512

>Sequence 513

>Sequence 514

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#### Table 3

>Sequence 515

>Sequence 516

>Sequence 517

>Sequence 518

>Sequence 519

AGGTACACTGTGAAATTAACTGGCATCCTGGTGGGCCCAAGGGTTTTCAG GACTGGGGGCCAATGACTCACCCCCTCCTTCCTCCTGATCCCTATCT CTAGCTCTTATCACAGATTTTGAACAATTGTCTGTGAGGTTAATGATGGT

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#### Table 3

CCGGGCAGGTACTGGTTTTAGTGTGAATTTACATAGAATAAATTTACTTC
ACTTTCATGTCATCGACATGAATGACACAAAAGCTACTTCATAATACTAC
TTTACAATAGTTTTCAACATTTCCATATGGTGCGACCCCTTTGCTCTCAT
CAATTTTGGGTGTCATGAGAACAATAGGTATCCCGTTGGACATGATGTAT
TGCGAAGAGCATATAAAGCAGAGGGAAAATGAAAAAGCAAGAGAAACTCA
TTTCAATGCTTTTTCTAAAAGGTAACAAATATAATTTTAATCAACTTCCT
TGGAAAAATATTTTTAAAACAGGTATCAATAGAAAAAAATTACAAAACATCA
TATGAAGCTATAAAATAATTTTGAAAAAACACCT

>Sequence 521

>Sequence 522

AGĞTACTGTCCTCGGTAACGGGCCGACTTAATGGGTAGATCAACGCGAAA TCCTTGGAAATATAACAACAGCAAACACAAAAAACTGTAGCAATGAGGT TTATGAGATTGTGAAGTTCTGCCGATAAAAAGCCTCCCGTAAAAGCTCCGG ACTTTGTCCGTCCTGGTGGCCAACAAATGGAACAGAGCTATGACTGCACC CTCAAACTCAGTACCTGCCCG

>Sequence 523

>Sequence 524

AGGTACCGGCCATTGGTGCCTTGTGTCAGGTCCCAGAGGGCTGCCTCAAT
GCCAGCAGCAATGCCCTCCACCACCTCCTCACTCAGTACTGGGTCTGGGA
GCTCCCGAAGGCTGTGGAGGCCAGGGCACAGAGTAAAGCTCCTGGGCTAA
GCCAGTGGCCAAGCCAGAAAACAATGCTGGGCAGAAAAGGGTTACAAGGC
AGGTAGTCTGGACACTGGATTCAACAGCTTGCCATCAGCCAGGGAAAGTG
AAGCTGAGGATGCATATGGAGCAGGGCCAGGAAGATCAGGAGAGCTGAGG
GAGAACAGGAAAATTGGGAGGAAGGAAGAGGCAGCTTAGCAGCAAACTCC
AGGAGAAATAACCAGCAGCCCTCACAGATTTGTGATTGTCTCTTTAAAAAG
AATTATTTTCTCTTTCTTGCCTGAATGTACCTGCCCG

>Sequence 525

CCGAGGTACCACCGATAATGCTATTAGCCCAAACCGTGGGTGTTTTCTAA ATATTAATAGGGGGGCTTGATTCAACAAAGCCACAGACTTAACGTTGAAA TTTTCTTCAGGAATTTTCTAGTAACCCAGGTCTAAAGTAGCTACAGAAAG GGGAATATTATGTGTGATTATTTTTCTTCTTATGCTATATCCCCAAGTTT

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### Table 3

TTTCAGACTCATTTAAGTAAAGGCTAGAGTGAGTAAGGAATAGAGCCAAA TGAGGTAGGTGTCTGAGCCATGAAGTATAAATACTGAAAGAAGTAACTTT TATTCAGGAAATAGGGGGAGATTCAAGTCCTATAGAATTCCTAACTCGAA AATCTTGACACCCTTGCTTTTTCAGGATGCACATTTTAATCCGGAGACCA GTTTCCTTTTGGTTTCTTCAAGTTAAGTAAAACCACCCGTTTCCTTTTT CCCCAAATATTAATAAATTTTGCTCCTAAGAGAATTTTTTTGCCCTGGGTC CANNCCCCCCATTCCCGCCTTTAAAACGCGCTCT

>Sequence 526

AGGTACTTTTTCCACGACAAATTCTTCAGGCTCTGCCTCTTCAACTTTTT TACTCTTTCCATTCTGTTTTTTCCCATTTTTTGCAATGTAGTTTTGTTG GAGGCCATTTTTATTGCAGACTTGAAGAGCTATTATTCACCGCCTCCGA GCTGCTCCGACCTGCCCGGGCGGCCGAGGTACTTGTGCCTAGTTTTTCAA CAGCCTTTTGGTGTGTCTTTATGTTCATTTGGAGAGTCAGGCCGAAAGAC AGGTGATGTAGCACTTCTTGTTTTTAATAATAATGGTTTAAAATACCTAA TAAAAGTTTTGGGTCATTTAAGGGGGCCTGAGGAAGCTTCCCAGGATTTC CGAAGAGTGTCCCACTAACAAGATGGCTTGGCCGATTCCTAAGTTTTGGA TTGGGGTCAAAAAAAAATTGGAAAAGGGGAAAAGGNNAAAGAATTGGGA **AAAGCCCGGGTTTTTTTTAG** 

>Sequence 527

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AGGTACAAACTCTGTCCAGTGCCCTGTTAATTGTTAATGTTGGTAGAAAG CAGATTTGAATGCTTCTTTTAATTAGCTTCATTAGTCATTTCCCACAAAC AAAACAGTATGTCTGTAGTTAACCTACTACTCTAGTAACCAACACATGGA AGCATCATATGCACATAAAAGTTAAAACATTAAAACAAAACTTAAAACTCT CAAAACAGATAATCATGAATTTGTGTTTTATAAAATTATATAGAATAAAGG CTTTGTGTGGGGGACTTTCAGACCTGCCCG

>Sequence 529

GGGAGCACGTACGACGCNTTGGAGCTCCTCCGCGGTGGCGGCCGCCCGGG CAGGTACAATTCGCCCCGTGAGTCTAGGAAGAT

>Sequence 530

CCGGGCAGGTGCGACCGCCACGGAGCAGTGGGTTCTGGTGGAGATGGTAC AAGACCACACCGGATGTCATCTTTGTATTTGGATTCAGAACTCATTTTGG TGGTGGCAAGACAACTGGCTTTGGCATGATTTATGATTCCCTGGATTATG CAAAGAAAAATGAACCCAAACATAGACTTGCAAGACATGGCCTGTATGAG AAGAAAAAGACCTCAAGAAAGCAACGAAAGGAACGCAGGAACAGAATGAA AAAAGTCAGGGGGACTTGCAAGGGCCAATGGTGGTGCTGGCAAAAAGGTG AGCTGGAGATTGGTTCACAACCCAAAGGGGTAAAGGTGTTGCAATGATTT TAGCTGGGGCCCATTGGGGATTTTTCCCAGGACCATTATTACCTTAAAAT TTCAAAAAAAAAAAAAAAACCTCGGCCGCTTTTAAAAAGGGGTTCCC GGGGCCCGCCCCAATTTTTTTTCG

>Sequence 531

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### Table 3

>Sequence 532

CTTGGCAGGTACAATTTTTATTAGGCATGTTATTGTTCCGAATGAAAAGA GTGGAGCTTTAAGTTAATATGCCAAAAAAATATTCCTAGCACAAAAGCCT GCACCACTGCTTGAGTCTCC

Sequence 533

>Sequence 536

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### Table 3

AAGGCTTTAACCCCTGGGGTACGGTGGGGGGGCCGTATAAAAAAAGGGG AACCCCGGGGGCGGGAAATTTATTTAAAATTTAAATACCCCGGT >Sequence 537

>Sequence 538

>Sequence 539

>Sequence 540

>Sequence 541

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GTGGAGGGTGTCTGATGGAATCCCGTTGGGTCCCGGCTGCCCTACGTCAC
CCTTTTCACCCTTAACTCCGTAGAAACCAAGTCCTCTGTTGCCTTGT
CCTTTTGGTCCAGGGGGTCCAGGTGGTCCTGGTCTCCCTGGAGCTCCAAC
TGGACCCATCTGTCCCACATGCCCGGGCGGCCCCGGGCAGGTACTCTC
AGAGAACAGGAGATATGTGTGCATGCCTTAGAAAAAAGCCCTTGAGTAGGT
AAGGAAGGAAGAAACCTATGGCAGACAGGATTGCTGCAGCCAAGGGGGCT
TCAAGCAGAAATGAAAGAGATGGCTTGTGAAGCTGCCCGTGTCGTGTG
>Sequence 542

>Sequence 543

AGGTACAAATTCTCTTCATAACCATTTGGTCCTCTGATATAAAACTTGCT TAACTGGCAAGATGGCTCACTTGGTCCTCAAGCCAACATCAAGAAATATT

> Page 437 of 685 of Table 3

## Table 3

>Sequence 544

CCGGGCAGGTACAATTAGAAAACCTGCATCTTTAATACAGTGAGATTTGT ATGCATACACTCTGGTGTCTTCATTTTGCAGCCCATTATATTGGCTTAAA AGCCAGAAAGGTGCTCATGCATGTAATTTATACTGGAGCAACGAATGCAG TGTATGTGGACGCGTGTGTGCACTTTGAAAGGCAGTAGTTTTAGAAGA ATGAGAAGAAAATTACTTTCTGGGCATTCATTAATAATTCAGGTGATATC CTGTACCTT

>Sequence 545

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>Sequence 546

>Sequence 547

CCGGGCAGGTACATAGACTGGGTCAGAAACAGATATAATACATTATTT TTAATATATTGCTTGTTAATAGCTTTAAAAATACTACATTCTATGGTAGA TTATTGGTTATATAAAAGGTAGAAATGTCATAAGTATTATAATGTCCAGT CTGTAAAACCTGTCAGTTGAGTGCTTTGAAGGTACCT

>Sequence 548

GCAGCAGGAGCCTGGGAANGAGGCCCTCACCTGGCGAGGGCCTCTTTCCC ATC

>Sequence 549

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## Table 3

>Sequence 551

CCGCAGGTACTTGTTATCAACACGTTTGTATCAGAGTTGCTTTTCTAAT
CTTGTTAAATTGCTTATTCTAGGTCTGTAATTTATTAACTGGCTACTGGG
AAATTACTTATTTTCTGGATCTATCTGTATTTTCATTTAACTACAATATC
ATACTACCGGCTACATCAAATCAGTCCTTTGATTCCATTTTGGTGACCATC
TGTTTGAGAATATGATCATGTAAATGATTATCTCCTTTATAGCCTGTAAC
CAGATTAAGGAATACAGCTCTTAAAAAATCAAGAACTTCCTGAGTTTCAC
ATATAAAATGGTGACAAACACCTGCTTCTGATAAAGTTTATCCAATTTTG
TATTTATAGTATTCTATTGTAATAATAGAATTCTATTATGTGCTTCCCTC
CTTAGACATAGTTTTTCTCCTTTTGTACCT

>Sequence 552

>Sequence 553

AGGTACCCCGTTCTGCCTGAGCATTTTTTCCTAAAGGGAAGAATCAATAG
TTTCTGACTGTTTTAACAGCTGAAAGCTCCAACTGGAGGCAGAAGATGGG
ATGGCTTTTCACACACGTGCGTGCAAGTTTAGCCACCTCAAGGCCTTGTT
CTTAAAGCAACAGTGCTGTTTGCATTATGAAATGTCTCTGGAGTTCCCCT
TTGGAAAGGCTGCTGGTGGGCCACATGGTCACGATACTTTCAAGTCACAC
CCTACTTTGTGACCTTATCCTCAGAGTAAAGGCTTTAGAGGAAAAGGGAC
CCCACAGTCTCACCCATTACCTGGCTGTCAGCATCTCCATATGCTCCTGG
CTGAGTTTTATTGAGCATCAGCTGGGGATGTGAGCAGAAACCTGAATCCT
TGAGACAGGTGGTTTTCAAAAAAGGAAGCCATAACAATGAGTGGCTTAGTA

>Sequence 555

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#### Table 3

>Sequence 557

>Sequence 558

CCGGGCAGGTTTTTTTTTTGAGACAGAGTCTCACCCTGTCACCCAGGCTGG
ATGGAGTGCAGTGGTGTATCTCGGCTCACTGCAAGCTCCGCCTCCTGGG
TTCACACTTTTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGACTACAGGCG
CCCGCCACCACGCCCAGCTAATTTTTTTTTGTAGTTTTAGTAGAGTCGGGGT
TTCACCGTGTTAACCAGGATGGTCTCGATCTCCTGCCCTTGTGATCCGCC
CGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCTACCACGCC
GGCCGAGGTACTGTTCCTGTTGGCCGAGTGGAGACTGGTGTTCTCAAACC
CGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAACGGAAGTAAAAT
CTGTCGAAATGCACCATGAAGCTTTGAGTGAAGCTCTTCCTGGGGACAAT
GTGGGCTTCAATGTCAAGAATGTGTCTGTCAGGGATGGTN
>Sequence 559

AGGTACAAGTTGGGGTCATAATTATCGAGTCTCTTGATATTATCACAATT
ACTGCGCCCCTGCACTTACTGCTGCAATGACTGCTGGTATTGTGCATGC
TCAGAGAGGACTGAAAAAAAACGGTATTTTCTGTATCAGTCCTCCAAGAA
TAAATATTTGTGGACAGCTCAATCTTGATTGCTTTGACAAGACTGGAACT
CTAACTGAAGATGGATTAGATCTTTCGGGGAATCAACGAGTGGAAAAAGC
ACGATTTCTTCACCAGAAGAAAATGTGTGCAATGCTGATCTTGGTAAAA
CCCCAGCCTGTCGCTAGCATGGCTACTCGCCATTCACTTACAAAAATTGA
ACGAGTGCTCTCTGTACGATCCACCTGATCTGAAAAACCCTTGAGCGCTA
TTGGATGGGACCTTTAAAGAAGAGCATCTGTTGCACGCTACAGCGCTTTCA
TGAGTCGAAAT

>Sequence 560

CCGGGCAGGTACCTGAAACTGCCGCCACATGCACTCCTCCACCGCTGAGA GTTGAATAGCTTTTCTTCTGCAATGGGAGTTGGGAGTGATGCGTTTGATT CTGCCCACAGGGCCTGTGCCAAGGCAATCAGATCTTTATGAGAGCAGTAT

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## Table 3

TTTCTGTGTTTTCTT

>Sequence 561

>Sequence 562

AGGTACATCGGAAATTATCTACAATGAAGAAAATTTTTTTGGTAAACTTAT CCAACAGCCTGGGCAAGCTACCTCTCGCATGGGAAATTGATAAATCTGAA TTTGATGGGGTGACCACAAATTCGAAACACAAATCAGGCAATGCAAAGAA ACAAGTTTCCAAGAGAAAAACTTCAGATAAAAAAGGGAAGATATCAGAAGG AATGTCCTCAGCATTCTCCTCTTGAAGATATTAAACAGCGGAAAGTATTA GACCTCAGACGATGGTACCTGCCCG

>Sequence 564

CCGGGCAGGTACTGAGGATACAGGAGAGAATCTAGCGTATAGTCTTTGAT
CTCAACGAATCCGCATTGTAGAAAGTAGAAAATGTCAGAGATGTACACAT
TAATTAGATCATGCCCTTCCACTACCTAAAATACTGCAGTGGCTCCACCT
TACGCATATAAAAACTCCACATTCCAGCCCACGCCTTCACGGATTGCTGC
GATCAGGCCCCCAGCACTTGACCCTCACCACACACCATCACCTCACCTAT
TATATTACATTCCACCAGCCCTTCTGGGCTTAAACACATGATCCCAGCAC
ACCTTACGTCCCTTACAGCCAGCGGTCCTTGGGCTGTGACACACTTTTCT
GAGACTTCCACCCACCTGGAGTGACTCTCTACCCCACTGTCCTGCGCTA
TGATCTTTATGGCATTTGCCACCATTTGAGAAGAAATACTCATTTG
>Sequence 566

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GGCCTGTGAATTGTACCT

>Sequence 567

AGGTACTCCAATGCGTGGCTCTCCTGTGTGATTCTTTCTCTCCACATGGT TGTGAGTCTTGACGATCGCAGCCCCTGCTTTTTCCCTTCCCTGGGAGGCT AGAACAGAGAAGCCCTTACTCCTGGTTCAGAGCCACGCAAGGCATAGGAG AGCAGCTGCCAAGAAAAAGCCCTGGCTTTAACCCCGGGGTTTTGGGACAC AGGGGGGTCCTGTTTTTCCTTGCAAAAAATATGGTGCAAGTGGGGGTTA ACACCCTCCGTCTAATTTTTATTTTTTTTTTTTTCTCACTACCCGTATTGT AAATACTAATTTTGGGTTCTTTACCCCTTCTAATGATGTCGTTTCCCCCC TACGAATTATCATTATTTTCCTCTCTGTTTTATTTTTTAATAAATTTTG TGTTTTTTGGATGTATAATTTTCATATTTATATCAATTTTTCTTTTATTA **TATAGTGGTGGTG** 

>Sequence 568

GAAGCTCGTTTGATCACTTCAG

>Sequence 569

GGCGGACCTCATCCGCCTCCTGCTGAAGCACGGGGCCAACGCAGGTGCCA GGAACGCAGACCAAGCCGTCCCGCTCCACCTGGCCTGCCAGCAGGGCCAC TTTCAGGTGGTGAAGTGTCTGTTAGATTCGAATGCAAAACCCAATAAGAA GGACCTCAGTGGAAACACGCCCCTCATTTACGCCTGCTCCGGTGGCCATC ACGAGCTTGTGGCACTGCTACAGCACGGGGCCTCCATTAACGCTTCT AACAATAAGGGCAACACAGCGCTGCACGAGGCTGTGATTGAAAAGCACGT CTTCGTGGTAGAGCTGCTTCTGCTCCACGNAGCGTCAGTTCAGGTGCTGA ACAAGCGGCAGCGCACGGCTGTAGACTGTGCTGAACAGAATTCAAAAATA ATGGAATTGCTTAGGGGGTACCTCGCCCGAGGTCTCCTCCTATGACTCCA TTCAAACTACGGGTATTAAAGCAGGGCCTCAGGGCCCGGGTCCTG >Sequence 570

AGGTACTAAAAACACAAAAGCACTTATCAGACACCCTATGGCATTTGTTG CTGAAATGTCTACCGGCTGGAGATTAGCCTTGAGCCGAAGCAGCCTCAGA GCCAACACTGGCTTCCTCTGTAAATCATCTCCAGCAGAGGACTCTGACT CAGCCGGAGAATTTTCTTCTTCTAGTTCAGCATATTCATCAGAGGTTTCG TTCTTTGTTGTATCTTTATCATTATCGATGGTGACAGCTTCATCCAGGGC AGCATTTGTAACCTCTGGGGTTGTTTCAGGGTTTACTTTCCGTGGTTTCC TGGTCTCCGGAGCAGCCTCCCACGTGACCTGGACAGGCAGATGCCTCTTT TATGACCACAACTGTAGTACCTGCCCG

>Sequence 571

AGGTGAAAAGTTTTATTCCTTTTGAGGACAAACAATTAAACCACATCCAA GGTCTTAACTTACAGACAGAAACCAAAGTAGCCATTTAAAGCGTTAGATA TCGGATACAAGACATACACTGGGGAGAATGCTTCACCATCTGAAGCTCAC ACCACAATGGCCCAGTGGACAGCTGTGCACTCTGCTTGTGCTTAAGTGCC TTTCACAAGTACCTGCCCG

>Sequence 572

AGGTACCTCCTAAACAACACAAACTCAAAATGGCTCTAAAAACCTGCAGT GCCAATCAGGCTGTGCATAGCAATTGCAACCCGTCCAGCCAATCTGTGAT TGTGTTTAGAATAGTGAAGTAATACTAAGGTCACTTCTGAATAATATTTT TGTCTTTTTTTGTTTGTATGAACAATCCATTGGTCACTTAGACCCCTAT GTAAAAATAAAAGAATCCTCAAGGCATGAAAACACCAGTAATCTGTAATC TGCAGGACTCTTCCCCTGTCTGGGAAAATATTTGCCACAATTTGCCTCAA GCAAATTCTTCTTGGTCACTCAAGGCTAAGAAAAAAATTCAGATTGTAAG ACCATTCTGGTGGCAAATTTAAAAGTGCAGAATATATG

>Sequence 573

CCGGGCAGGTACGCATTTAAAATAAACCATATAATTTTACCAGTAAGAAA

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#### Table 3

>Sequence 574

>Sequence 575

>Sequence 576

CCGGGCAGGTACATGAACTGTAGAGTCAGAGTTAATGTTGACAAGGTATT
TTTTGATTTAATGAGAGAAATTCGAGCGAGAAAGATGGAAGACAGCAAAG
AAAAGAATGGAAAAAAGAAGAGGAAAAGTTTAGCCAAGAGAATCAGAGA
AGATGCTGCATTTTATAATCAAAGCCCAAACTCCTTTCTTATCTTGACCA
TACTAATAAATAATTTATAAAGCATTGCCATTGAAGGCTTAATTGACTGAA
ATTACTTTAACATTTTGGAAATTGTTTGTATATCACTAAAAGCATGAATTG
GAACTGCAATGAAAGTCAAATTTACTTTAAAAAGAAATTAATATGGCTTC
ACCAAGAAGCAAAGTTCAACTTATTTCATAATTGCCTACATTTATCATGG
TCCTGAAGTAGNCGTGTAGCTTGTGTTTCTGGGCAGTCTTTTTTGAATTGA
AGAGGTGATGGGGGGAG

>Sequence 577

CCGGGCAGGTCATAAAGAGTGTTGAAGTTTTATTTATTATAGCACCATTGA GACATTTTGAAATTGGAATTGGTAAAAAAAATAAAACAAAAAGCATTTGAA TTGTATTTGGTGGAACAGCAAAAAAAAGAGAAGTTTCATTTTTCTTTGTC

> Page 443 of 685 of Table 3

# Table 3

AAATTATACTGTTTCCAAACATTTTGGAAATAAATAACTGGAATTTTGTC GGTCACTTGCACTGGTTGGCAAGATTAGAACAAGAGGAACACATATGGAG TTAAATTTTTTTTGGTGGGATTTCAAATAGAATTTGGTTTATAAAAAGCA AACAGGCCCAACGTCCACACCAAATTCTTTGATCAGGACCACCAATGGC CTAAGGGTGCATTTTTTCAATTAGGGTAGCCTACCACCTTTGCGTTGTCC ATTTTCAAAAGACTTGTTTGGTTCATTTCCCCATTGTGTTTTCGTGCAAC CATCCTCAAACCTGGGTAGGTGGAATTGGCTATTTCCTTCAGCCTTTGAT

>Sequence 579

AGGTACAATCTCAGCTCACTGCAACCTCCGCCTCCCAGGTTCAAGTGATT CTCCTGACTCAGCCTCCCGAGTAGCTGGGATTACAGGCATGCACCACCAT GCCTGGCTAATTTTTGTATTTTTTGTAGAGACAGGGTTTCACCATGTTGC CCAGGCTAATCTTGAGTTCCTGAGCTCAAGTGATCCAACCACATCTTGGC CTCCCAAGGTGCTGGGATTCCAGGTGTGAGCCACCGCCCCCAGCCAACAA TAATTTTTAAGGAGAAATACCAAATCCAGAATACTGATTACCTCTGGGGA AGAAAACAAAAGAACAGAATGAGAGAGAGATACACAGGGAACTTCAACTG NNCCCCCCNNCCNNCCCCNCCCNNCNNNCCGGGCCCATCCCCCNCNCC 

>Sequence 580

AGGTACAACATCTTTGAAGGGATGGAGCTGCGCGGGGCTCCTCTGGTTGT CATCTGCCAGGGCAAGATCATGCTGGAAGATGGCAACCTGCACGTGACCC AGGGGCTGGCCGCTTCATACCCTGCAGCCCGTTCTCCGACTATGTCTAC AAGCGCATTAAAGCACGGAGGAAGATGGCAGACCTGCATGCCGTCCCAAG GGGCATGTACCTGCCCGGGCGGCCGCCCGGGCAGGTACCAAAAACCAACA TGACACACAGGAAAAAATAAAAGTGCAATTTTAATATAGTGAATGTGATA CATGTATAATTCCTCATAACAAAATGGTCAAAACCTTTAAAAGATCCACA ATAGATATCTGAAAATCTTAGCAATGCTGTATATATTTTGAGGACTAAAT GATGAATTTATATTCAAATTGTTCAAAATATATTTTCAAAACTTTCAGACA CAAATCAATGGTAATTCTGCTTTTAATTAAAAAACCAN

>Sequence 581

CCGGGCAGGTACATCTCCTCGATCATCTCGCGGAGGGCCAGGAAGTAGGG CCCGTTTTCATTTGGGGCTCGGCGCCAGTCATAGGGAGCCCCTCGGACAT CCTCACCCGTGTGTAGCCCCAGCCCACAAGGCTCTCCACCATGGTGTGG AAATAGGAACCCACGCTGCTTTTGCTGGGGTCCAGGAACTCCAGTGAGAA GGTCTTCCCAAAGCCAGGGACACGTACCTCGGCCGCCCGGGCAGGTACTC CAGGACGAAGAAGGAAGATCATGCTTGATACTTAGATTGGTTTTCCCAGG GAAGAGGGCGGAGCAGAGCAAAGTCACTGTGAACCCTGGGCCAGGCCCTG GCTGGGCCAGCTCCTGAGAGCGTCTCGTGTTGCAGACCCTTGCCCACTTC ACCCACCTGCACCTTCTTCCCCTCTCACAGTGTCACTGCTGCTAATGGTC AAAGTCAAATGTGTGGCCACATGGGATGGGCCAGGT >Sequence 582

GAGTCTTGCTCTGTCACCAAGGCTGGAGTGCAGTGGCACGATCTTGGCTT ACTGCAACCTCTGCCTCCTGGGTTCAAGCAATTCTCCTGCCTCAGCCTCC CAAGTAGCTGGGACTACAGGCGCACGCCCCACACCCAGCTAATTTTTGT ATTTCTAGTAGAGACGGGGTTTCACCATGTTGGCCAGGATGGTCTCAATC TTTTGACCTCATGATCCACCCGCCTCGGCGTCCCAAAGCGTTGGGATTAC AGGCATGAGCCACCGCACCCGGCCTCACTTCAAGAATTTTTTACAAGCAC AGAAACTATATCTCAGTGTATGATAACTGTTACTATAATACTATATTGTA TTATAAATATACAAGCTATCTGAGGTGTGTGATAGCTCCACTACCTNCAC CAAGCTTTAGGAATATATATAATCTACTTTTGACCCCAAAGCCACAA >Sequence 583

CCGGGCAGGTACCACTTCTGATGATGGAAGCAGTGACCTGGATCCCATAG AACACAGCTCAGAGTCTGATAACAGTGTCCTTGAAATTCCAGATGCTTTC GATAGAACAGAGAACATGTTATCTATGCAGAAAAATGAAAAGATAAAGTA

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TTCTAGGTTTGCTGCCACAAACACTAGGGTAAAAGCAAAACAGAAGCCTC
TCATTAGTAACTCACATACAGACCACTTAATGGGTTGTACCT
>Sequence 584

ACCCAGATATGTAAGACAGAGTCCCAACTTTGGTTGTTGGGGACTATTTA

GGATACAGAGATTAATA
>Sequence 585

AGGTACACACATCCTTTCAAATATTCTTTCTTTATTCTCCAATTCACTT
TTCAGGAGAATAGATAACCTCAATCATATTGATTCTCAGCCTAATGGTCT
CCCTTACATAAATTATAATGACATAAGCATTTTGTATCACTTTATTGTTA
CCATCGACCTCCTACAGTTTGGGGGAACCCAATCATTCTTTAAAACATTA
GAATGACAACTCCAGTTGATTTGGCATATTGTATAGGTGAGTGGGAAAGA
CTTGTCAAATCCCAGAAAGGGGGCGTGGCACCAGCACCACCCAACCAGAA
GAAAAATCTCTCTTTGGTGCTAGTGTCATAGCTCCCTATCTGTTCCGCTA
ACCCATTAAATGATGTGGTGGAAGAGGATCCTTTACAATCTTTGTTCATT
TTTTTTACAGAGCAATGGAAGTCATCATAACCTTTACAAATTATTTTTGGT
TTAATTTTTCCAGGTTGGGAATTTGGGAG

>Sequence 586

CCGGCCGGGTCCTTAAAAAAATAGAGGAAATTTTTATTGGATCCCAATAG GGCATTTTAAACCTACAACCAGCTTTCTTTCTTCAATTTCAAAGCTAATA CTCTGCAAATCCAATAAAATCTGCCATTTCATATCCATTCCTGCTTTATA TTTTTATATTTTAAAAGAAGCCACCTGTAAATACTATTTTCTTTGGCAAA ATACCAAAAGGGACAAAAAACCTTTAAAAATTACAGTAAAACATAAAGTA GTTCTCAGGTGGAAAAGTTATCATTCCCAATGTCCTTGAGTTGTTCCTTC CTTAATCAACCTTTGTCACATTCTGCTTCAA

>Sequence 587

CCGGGCAGGTACTACTTTGAGGGCATTAAACAGACCTTTGGCTATGGCGC ACGCTTATTTTAGGGCCAGCGGCAGGGGACTCCAGCCTGCTGGACACTTC AGTCCAGCTCTCCCTGACTGGGGCTTGCGACTCACAGGATTGCATCGTC CCAGCTGCTAACTTGGGGCCGGGGCCCCTCCCTTCCACATATACCTTGGG TTTGTGCATGTTTTCTGCTGGGTGGGTTCAGAGGGCAGGGGACTCCAGC TGCTGGACACTTCAGTCCAGCTCTCTCCTGACTGGGGCTTGCGACTCACA GGATTGCATCGTCCCAGCTGCTAACTTGGGGCCGGGGCCC

>Sequence 588

CCGGGCAGGTACGTAGTAAGAGAAACATTGCCACAAAATCCTCTTTTAAA AGCTCTTTCAGGACACTAAATTAAGTCATTCATTTCTGAGATTTTAAAGG CCAACAATGTCTCTATTTTCAGACTATGTCACAAATGACATAAATGCCAA AATTATAGATCTTAAGAAGACAACACATAAAATACAGACTTAGACAAAAC AAATGACTAAAGCTGCATAGTTCTGCTAGACTTTATTCAAAACTGGCTCT ATTCTTAATTATTTGAGAGACCTAAAATTCTAGTGTTCAAATGTAAATAC CCATCATATACTGAAAAGTCATCTTCAAATTTGTG

>Sequence 589

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#### Table 3

TCAGG

>Sequence 590

CCGGGCAGGTACAGGACAGCCAGCGTCATCATTGCTTTGACTGATGGAGA
ACTCCATGAAGATCTCTTTTTCTATTCAGAGAGGGAGGCTAATAGGTCTC
GAGATCTTGGTGCAATTGTTTACTGTGTTGGTGTGAAAGATTTCAATGAG
ACACAGCTGGCCCGGATTGCGGACAGTAAGGATCATGTGTTTCCCGTGAA
TGACGGCTTTCAGGCTCTGCAAGGCATCATCCACTCAATTTTGAAGAAGT
CCTGCATCGAAATTCTAGCAGCTGAACCATCCACCATATGTGCAGGAGAG
TCATTTCAAGTTGTCGTGAGAGGAAACGGCTTCCGACATGCCCGCAACGT
GGACAG

>Sequence 591

CCGGGCAGGTACACGGAAATCTGGACAGTGCTCCACAGATTGATACATTA
GCCTTTGCTTTTCTCTTTCCGGATAACCTTGTAACATATTGAAACCTTT
TAAGGATGCCAAGAATGCATTATTCCACAAAAAAACAGCAGACCAACATA
TAGAGTGTTTAAAATAGCATTTCTGGGCAAATTCAAACTCTTGTGGTTCT
AGGACTCACATCTGTTTCAGTTTTTCCTCAGTTGTATATTGACCAGTGTT
CTTTATTGCAAAAACATATACCCGATTTAGCAGTGTCAGCGTATTTTTTC
TTCTCATCCTGGAGCGTATTCAAGATCTTCCCAATACAAGAAAAT
>Sequence 592

>Sequence 593

TACATAGAGGTGAGGGTCATG

CCGTGTTTCAGCTCAATCANNGTCAGGACTTCGCNNCTGCCCACCATNNA TGGTAGGCGGNAGGGGCCATNTGGNAGGCAAGCTTCAAAAGGGTTGGACA ATTGGCTTGACCCCAGAGGAGTCCCAACACTTTCAACTGGGAAGAGGGCC AGCCCTTATGTTGGGGCAAAAATGGGAAATTGCGGGCCCTCCTTTTAAGC CTTAATTTTTCCGGCGGGCCGGATCCT

>Sequence 594

>Sequence 595

>Sequence 596

CCGGGCAGGTACCTTTNTCGGAGATTATGTCTACTTTGAGAATTCCTCCA GCAACCCATACCTAATAAGAAGGATAGAAGAACTCAACAAGACTGCAAGT GGCAACGTGGAAGCAAAAGTAGTATGCTTTTATAGACGACGTGATATTTC

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# Table 3

CAACACACTTATAATGCTCGCAGATAAGCATACTAAAGAAATTGAGGAAG AATCTGAAACAACAGTTGAGGCTGACTTGACCGATAAGCAGAAACATCAG TTGAAACATAGGGAACTCTTTTTTGTCACGCCAGTATGAATCTCTGCCCGC AACACATATCATGGGAAAGTGCAGTGTTGCCCTTCTGAATGAG >Sequence 597

CCGGGCAGGTACTCATGGAAAAGGAGTTCCCTGGATTTTTGGAAAATCAA
AAAGACCCTCTGGCTGTGGACAAAATAATGAAGGACCTGGACCAGTGTAG
AGATGGCAAAGTGGGCTTCCAGAGCTTCTTTTCCCTAATTGCGGGCCTCA
CCATTGCATGCAATGACTATTTTGTAGTACACCTAGAATCTTTTGTGAATA
ATGTGAGGCCAGTTCTTCCATAAGGAAGGCTGGTTATGGATATTCATAAG
GTTATTTCAAAGTTAATAAAGACAAAGTGGCAACTGTAGAAAGTGTTGCC
TCCAATCTTGGTCCGTATTTCCAAAGCTTGTAAACACTGCCAT

>Sequence 598
AATTGCGGAACGACCCCNANAATTCGAGNGGNACTCCCCGCGGNGGCGGC
CGAGGGNNNNNNNTAATANGANAGAGAGGNAGGCGGCCACCCACGCGG
GAGNGCAGNAGCACGACCNCATTTCACGGCAACCGGCGCNCCCGCGNAC
AAGAGANNCNCCNGCCNCAGCCNCCCAAGGAGCNGGGANNACAGGCANGC
GCCANCACACCTTTTTAANNTTTTTTTTINCCAGGGGGAGGGGCCCCAC
CAAGAAGGCCAGATTTTTCTTGAACTCCTGACCTCAAGGGATACACCCAC
CTTAGCCTCCCAAAGGGCTGGGATTACAGGTGTGAGCCACCGTGCCCGGC
ACAACCTTTCTTTGTTATGAACANCCTGTGTCTGCTGTGAGATATGCTGC

>Sequence 599

>Sequence 600

ACGTGCGGGAACACCCACCANAGCGTGGAGGTGNAACCACCGCCGNGGC GGCCGAGGGACNNCANAAGGGTGNCNGGGTCCATTAAGTCCNCCACCCC CNNNCNAGGACACCNNGNGGAAGGGTGCAAAAGCCNCAGGGGGGGACC AAAGAGAGNGAAGNGACCGNCNCNCCAAGGGCCNCCAANANGNCCGAGG NGANGGCAGCCGCNCGTAAAGANGATGTTGTANCNGGGGGGGGAACGCC CCCNAGAAAAGAGGGACCNGCTCGGCCCGCCCGGAGGAAGCACGAGG AGNNCNGNGNCCCCACGGGCACGGNNCCCGCNACGGNNGCCAACAAGGAG CCGAGAACCGANNNCAGCAGCAGGANCNGGAGNCCAACGGGGAGCACCG GACGGAGAAA

>Sequence 601

>Sequence 602

GACTTCGGATACTCTACTATGTCTTGAAGGGAAACCACCGCGGNGGCGGC CGAGGGACTGCATCAGCTAGATGAGGAGGGTAAATCGNNNGGGATNNGAA GACTATNAAGAACCTAGNAAGTCTTCGGNAGNNNACGGNGANGNGAGCAN NGAAGACCCCCCCGNNGNCACNAANCACACAAANAACAANNNNGAGAAGN AGGCNANAAAACAATTTAGGNNGCTTTTTTNCNANNNGGAAAGAAACCAAA AAAAAAACAGAAAAGANGNGAANCCCCCCCAGNGAGGGGGGAAAGGGAAA

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# Table 3

GCAACACCAAANAAAAGCCCACAGCAGCNNCANCNNAACGAAAACCCAGN GCANANGNGAAAGAGAANGANGCANNAACNGAAANACCNCANNG >Sequence 603

AGGTACCACGCACAGGAGCCGTCATTTCTCTTGATGCAGGCGAAGAACTT ACTCGTCCGGGGAGGAGATGTAGCACGGGATCATGGGGCAGCGCGTGATC TTGCACTCGCAGCCCATCTGGTACCTGCCCGGGCGGCCGACCGGGCAGGT ACTTACTTTCCGCATAGGAAGACAGACCATAGGCAAACTCTGTTTTGGGA TCTCAACTCCATCACCTTTGTTTCAATATTTTTTTTTTCTCTCTTGAACAA **AACTGAGATAATTTAGAAAACAGGC** 

>Sequence 604

CCGGGCAGGTACAGGCACAGCATATATTTGAGAAAACATCTTACAAATTT CATTTACTATAGGTTTCTCAATAATCTTTACATTTAATCAATGAGAAAAG TGATTCAGTCTCTTGAATTTTAAGTTAAAAAAATTAAAAAGTATTTCCAG GGACTCTTAAAGCTCTCCCCAAAGTATAAAATATTATGTACTGTGGGGT CAGATTCAGCATACTTGAGGGAACGAAAGACTTTTCGTTGGGGCGTGACC CGTTTGATGTTTGGATGATCTTCAAGTGTTAGCAGCCCCGCTTTCTGTTT TTCTTTTATCTGAA

>Sequence 605

AGGTACAGACATTTTCAAAGTTGCCAGTGTTACTTTAATTGGACTGCCTT CGTAATTCATTGCCTCTGCTTCAACAATGTGCAACTCATCCTTTGCACCA GCCCCTAAACTGACCGTTCTTAAAGATAACTGGTGCTCATTTTCATCATT ATCCACCTTAAAGTGATAATCTTTGTCGGCCTTTAGTTCACAACCGAAAA GATAGTTCTGGGGCCTCAGGGGGCTCATGTCCATGTCCATCACAGAATTC TTTAATATAAATACGAACGGATGGGGATAAATAATATTTAAAACTTAGAT TATTCAATGCTTGCAAAAAAC

>Sequence 606

CCGGGCAGGTACATATGATCCTTAGCCACCAGGGCACAAGCTTACCAGTA GACAATACAGACAGAGCTTTTGTTGAGCTGTAACTGAGCTATGGAATAGC TTCTTTGATGTACCTCGGCCGCCCGGGCAGGTACCTTAACATTCACATGG AAGTAGTAAAAATAAGATTCTGGGTGCAGTTCTCCAATGACAGGAAAAAA AACAAAGAGAATTTGAAGAATACGTCAGAGACAAATACATTACAACCAAA ATTGACTTCAAGGCACTTTTGAAGGAGATCAAATTTATAACAAAATAATT TAGTGAAAGTGAAAGCTTG

>Sequence 607

CCGGGCAGGTACCTGGACCTGCTGTCCCAGCCCTGCCGCGCTGTTTACAT CTTTGCCAAGAAGAACGACATTCCCTTCGAGCTGCGCATCGTGGATCTGA TTAAAGGTCAGCACTTAAGCGATGCCTTTGCCCAGGTGAACCCCCTCAAG AAGGTGCCAGCCTTGAAGGACGGGGACTTCACCTTGACGGAGAGTGTGGC CATCCTGCTCTACCTGACGCGCAAATATAAGGTCCCTGACTACTGGTGCG GCGCACCCTTCAGGGTCTTGAGATTGAGCTGCAGTCACAGCTGAGCATGA AAGCTGCCTTGGAAGACACACTGGCN

>Sequence 608

AGGTACCCAGGATGGTAGCTGGCAGGAGGGAGCCTGTGTTCCTGTGACCT GTGACCCACCTCCACCAAAATTTCATGGGCTCTACCAGTGTACCTGCCCG GACTTCCTCCTACCTACAGTCCCTGCTCCTATTCCCACCTCAGCAACT GAAGCCGCCCCTGAGCTCTGCTTTGAGGATATAAACACATTTAAATTAC TGTCATATGCTTCCTATTGCATTGAGCATGGTGATCTGGAGCTAGCAGCA AAGTTTGTCAATCAGCTGAAGGGGGAATCCAGACGAGTGGCACAGGACTG GCTGAAGGAAGCCCGAATGACCCTAGAAACGAAACAGATAGC

>Sequence 609

AGGTATTAACACATGATGGAAAAGTCATTGTGACGCCAATGAATTTCATT GAGTATAAACTCATCTACTTCAAATTTATTTTATAAGACAACCTAAGATA CTCAAGATAATTATTTAATGGTTAGCTCTTAAGTTGAATTGGTCTACATA ATGCGTGGGAAGAAACCAGATTTTTAGCCTTCTTGCCAAATCCAGACCT CTGGTTGATTTTTCTTTGACAGAAGATGCAAGTTATTTTCCAATTTCACA

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#### Table 3

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>Sequence 610

>Sequence 611

AGGTTTTGCAGCTCGTGCCATCATTTCAGAGCTGGTGAGCATTTCAGAAC
TAGCTCAACCACTAGAAAGTGGCACCCATTTTCCTCTCTTCCTACTTTGT
CTTCAGCAGTTAGCTAAATTACAAGATCGAGAATGGTTAACAGAACTTTT
TCAACAAAGCAAGGTCAATATGCAGAAAATGCTCCCAGGTAAGAGAATGC
TGACTTGTTTGTTTTTTTTAATATTATATCTAGAGATTTCAGGTAC
CTGCCCG

>Sequence 612

CCGGGCAGGTACAAATGTGCCGTGTCTAACAACTTTCATTGAAAATGCCA TATCTATACCATATTTTATTCGAGTCACTGATGATAGAATGATATATCTT TTTCATTATTATAGCAGAATATTTTTATGGCATGATATTAGACGGCTTGA TCATACCTATTAAAAATAATGCCAAACACCCAAATATGAATTTTATGATGTA CCT

>Sequence 613

>Sequence 614

CCGGGCAGGTACCTCTTGAGTGTCCCTTGAATTGGTAACCGGTTTGTTGT CATTATTTTCTAAGCGAATATGCCGTAATTGGTTATTGGGAACATCTTTG ACAAAGATCCATTTAACTTCAAATTTGCCCTTCCACTTATCCTGAGACCA GACACCAGCATACGCATTATAGTCCACAACAGACTTCATTTCAGCCACTC CACAAAAATGTCCACTGCCATTCACACTGAAGAGTAAATAGAGTGGGCCT TTCCCATTCAGGGAACGGTAAGCTGCATCCAAACGCTTATTACCATGCTC AGTACCT

>Sequence 615

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>Sequence 617

CCGGGCAGGTACAAATGTGAAGAAAGCTTTGTGAAAAATTCCTGGCGAGAA GGACTCAGTGATCTGCCTTAAGGGCAGTCAATGGTCAGATATTGAAGAGT TCTGCAATCGTAGCTGCGAGGTGCCAACAAGGCTAAATTCTGCATCCCTC AAACAGCCTTATATCACTCAGAATTATTTTCCAGTCGGTACCTCGGCCGC CCGGGCAGGTACCCAAGGGATGTTTCCAAGCTTCTTGATCTTTAATCTTT

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TAGCAACCTTCTGATACTGGATTTACCTTCCTAGGTGTGCCCTCCTTCTGGAATTTAGATCTCTGGGGCAAACCCTGTCAGGATG

>Sequence 618

CCGGGCAGGTACCCTGTGGCAAAATTAGTCACTGGTAATGAGAAAGATAT CACTGAAAGCCTCAAGTGCCTGAGAAACAGTTTACTCATCCATGGGATCT CGCCAATTGTGAGGAAACAGCTCAATGGCCATTTCCAGTTATAAGCAGCT TATTTTTACTGATTGGACCTGGTTACCTATCATTTCTAAAAATAACTTCT GATACAATTTGTACTTCCAATTTATAATGAATACTTTCTTAGATTTTAGG TAGGAGGGGAGCAGAGGAATTATGAACTGGGGTAAACCCATTTTGAATAT TAGCATTGCCAATATCCTGTATTCTTGTTTTACATT

>Sequence 619

AGGTACTCAATACATCTTTAATAAAAATGGGGATCGGCTTCTCTGGAGTC
ACGACAGTTGTTAAGGGCACCCCAAAATAGTTACTCTCCCAGGTTGCCTT
TGCGGTGGATGGCCGGCGTTTGGGCTTTGGTTTCTTAGAGCTCCTCCTTA
CGCTGCGAAGAATATTCCTGCTCCGAGGGTCTTCGACTGTTTCGTATGGA
ATGACAGCATTGTCCCCTTTATAACCCTGGGATGCCTGATCCTCCTCTTT
CTTTCGGATGGGCCCCAGCTCATCATCACTCCCCACGCTGAAGCTGCTCC
GGTAACTAGCAAACCGCCCCAGCCGGGTGCATGTCGTACTGTACCTGCCC

>Sequence 620

CCGGGCAGGTACTGAACAAAGGCATAGCCCTTGTGCACAGAACAGCCGGC CACACGGCCATACTTAGAGAAGATGGTCTCCACATCTGATTTCTTCACCA GAGCTGTGTTGAGGTTTCCAATGAAGACTCGAGAGTTGATGGACTTGGGG TCATTCTTGTTGGTTACATTGCTTGCCTGAAGCTTCAAGGACATGGTGCC CACTTAACAAACATTTCTTGAGTGTCCTCCTCTGTGCTGGCACTGTGGAG ATGCTGGGAAACACCGTGCTCACCAGTCTTCTGCTCTACTTGCTTTTCAA GAAGCCCCCTCTCTGGGAACCAGTAACAATGATGAGCTTAGCCAGCTGTT TCCTCCTTTGGGTTACAGGGTCAGCACCACCTGCCTCTGGGAATAGGGCT ACCNNCCGCCGAGAGGTCTGGAGGAAGCCCCGCGGCTGGAAGAAAGCGGT ACCTTGG

>Sequence 621

>Sequence 622

AGGTACCAGGAGAGCACAATTGGAGCGGCCTTCCTCACACAGACTGTCTGCCTGGATGACACAACAGTCAAGTTTGAGATCTGGGACACAGCTGGACAGGAGCGGTATCACAGCCTGGCCCCATGTACCTGCCCG

>Sequence 623

>Sequence 624

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#### Table 3

CCCGGGGAAAAGGAAAAACCCCCCCCTGGAGAGGG

>Sequence 625

AGGTACAACAGGCTCCAATGACAACACTTAATTCCAGCTATACGGGGCAA
AAGATGTTATGGGAGGGAATAGAGAGGTTTAAATACAGACGAAATAAAGG
GTCACCATCTCCTCAGGCACAAGGAACAGCTTACTTTTTGCCAGATCTCT
TATTTCCACCTGTGGCCAAGGGCCCCTTCCCCGTGGCCTACGCTTTTAGC
TACGCGAGTAACTACTGCTCCTATTTTTGAATCTGCTTGAAAGCCTTATC
TTCCTCGAACATCTCCTTGGCCTGCTTGTTGGGCTGGTTCAATGGGTATT
TCTTGCCACCTAAAT

>Sequence 626

CCGGGCAGGTACACAAAAAAAACATTTGGTATCAATAATTTGGTTGTGCA TTCATTTATTCAGTCAACAAATATTTAGCTGAGCACTGGCTAGCTGCCAG GTATTGCACTAAGGACCCAAAGATGGAAGAGATGATGTCCCTGCCCTCAT GGAGCTTGCAGTCGTGTTGAGCAGACTGTCAAACAGATTTAGGTAAGGCA ATGTGACCAGTGCTATGATACAAACAGGATGCTACAAGAGTACCT >Sequence 627

CAGAAATATGAGATCAACGTGCTGTACC

>Sequence 628

>Sequence 629

AGGTACCATGTACTTATTGGAGTTCCTTACGAGATGTACACATCGCAGTA
CCTAAAGAACTGCCCCTACCACTTCCTCTTGGGCTTCTTTATTCGCATTG
TGGATCAATCTATTTTGTGCGACTCTTTACATTGTATCATCTCGGCAACT
TAATCCTATTCTTACTGACTCATACTCCTTATGCTGAACTTTTCAATCC
AAAATCTCTATTGTTGTAGGACTCTGGGAAGCGGTTGATAAAAAGATAAC
ACGAGCTACTGATATGGACAGGAGATGTTTTCTAAACAAATTGTATAAAT
ATAAACATGAAATGTGGCAATGATCCCTTTAATTAGAACATTGAGCAATA
AAGGATATGAACCATTAGTATAAAAAATTCACATTCAGTCTTTCCGGATTG
TGTTGTTAGATAATAACACATCCATAAAGGGCCACATTATCCTAGTAAAA
ACCAAAGTGGGTTGATGGCCATATTGTGTAAAAG

>Sequence 630

> Page 451 of 685 of Table 3

# Table 3

ATGTATTGTAATTAGAATTGTTGGCATGATGACATTTCATTTGTGCCAAA
AATATTAAAAATGCCTTTTTTGGAGGGACTAACAGAAAGCACCTGATTTGC
ACTTGAACCAGATTATAGATTTAAAAGTTTATGACATGTATTTTTT
AAAACTAGAATAGCCAGTATTTATGTTTTTTTATAAAACTGTGCAATACGA
ATTATGCAATCACAATACATTTGG

>Sequence 631

AGGTACAACCAGTTGAAATTTCCAGTAAAGCCTGCTGATCTTAAGAAGAG
AATAGAATCTTTAATTGACCGGGACTACATGGAAAGAGATAAAGAAAA1C
CAAACCAGTAGGCTGGAAGAGGATCTTGGGCGCCCCAGTCTTTAGCACC
AGTTGGTGTAGGAGTTGAGACCTACTTCACAGTAGTTCTGTGGACAATCA
CAATGGGAATCCAAGGAGGGTCTGTCCTGTTCGGGCTGCTCGTCCTG
GCTGTCTTCTGCCATTCAGGTCATAGCCTGCAGTGCTACAACTGTCCTAA
CCCAACTGCTGACTGCAAAACAGCCGTCAATTGTTCATCTGATTTTGATG
CGTGTCTCATTACCAAAGCTGGGTTACAAAGTGTATAACAAAGTGTGGGA
AAGTTTGAGCATTGCAATTTAACCGACGTCACAACCCGCTTGAGGGAAAA
TGAGCTAACGTACCTGCCCGGGCGCCCCGAGGTACACCTTGCTT
>Sequence 632

CCGGGCAGGTACCTGAGGATCGATAAAAGAGGCAAAGTAAAAGGGACCCA AGAGATGAAGAATAATTACAATATCATGGAAATCAGGACAGTGGCAGTTG GAATTGTGGCAATCAAAGGGGTGGAAAGTGAATTCTATCTTGCAATGAAC AAGGAAGGAAAACTCTATGCAAAGAAAGAATGCAATGAAGATTGTAGCTT CAAAGAACTAATTCTGGAAAACCATTACAACACATATGCATCAGCTAAAT GGACACACAACGGAGGGGAAATGTTTGTTGCCTTAAATCAAAAGGGGATT CCTGTAAGAGGAAAAAAAACGAAGAAGAACAAAAAAACAGCCCACTTTC TTCCTATGGCAATAACTTAATTGCATATGGTATATAAAGAACCAGTTCCA GCAGGAGATTTCTTTAGTGGACTGTTTTCTTTTTAAAATTTTCTTTT

>Sequence 633

>Sequence 634

>Sequence 636

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#### Table 3

CCGGGCAGGTACTAAACACAGATGGGCACACTCTAGATATAGAACACGTT
TCTTGCTGTGTGTGTGACAAATGGCTAGAATTTTAGGAGGCTCTGGGA
CTGCACACTGTATATGCAATCCATCTCAGACTTTGGGATGGGAATCCATT
TCATCATCCAGCATGGCGAAACTTGGTTCATTCGCCCCAATGTGAGTCCT
TCCTGGGTAAAATTAAAGGCAGACCGGTTGGGTGCTAAGGATCCCTGGTG
TGGAGAGGCCATTCCGTTGAGCAGCTGACTGTAAAATCAATACCAAAGGN
GATGNTGGGTCCTGGCGTTGGGGAATTCTTTGACAACTTTCTTGTCCTTC
CTTTAGCATGNGCTGTTCCCCGGAGGTCTTTCGGCCTGGTTTCTGCCTGG
GGGGTCCCGACAGCACACCACCTTGGTAGATCACAGGACTGGGAN
>Sequence 638

>Sequence 639

>Sequence 640

AGGTCCGAGAAAAGAGCTAGGGTAGGCAACTAAAACTTACACAGTGCCAG
TCTCAGGAGGTCAGTAGCTCACAGAACTCAACAGATAAACTGGATTAAAA
CTTAAAAGTCTTCTTTCTATTTGAGCCCATAATGACTATTTTGAACATGG
CTCTTTTGCTGCTGCCTATATATAAAATTTTTTATTAATTTTCTTGTATTG
GGAAGATCTTGAATACGCTCCAGGATGAGAAGAAAAAATACGCTGACACT
GCTAAATCGGGTATATGTTTTTGCAATAAAGAACACTGGTCAATATACAA
CTGAGGAAAAACTGAAACAGATGTGAGTCCTAGAACCACAAGAGTTTGAA
TTTGCCCAGAAATGCTATTTTAAACACTCTATATGGTGGTCTGCTGTTTT
TTTTGGGAATAATGCATTCTTGGCATCCTTAAAGGTTTCAATATGTTACA
AGGGTATCCGGGAAGAGAAAAAGCAAGGCTTATGTATCAATCTGTGGAGC

>Sequence 641

AGGTACCTCAGGGGTGGTCTGTGGAAGCCTTAAACTCTCCACACTCAGAG TCCTTTGTTTCCCCAGAGGCTGTTGCAGAACCTCCTCAGCCAACGGCAGG TATGTCTCCCTGCAACACAGCTGTTGTACCTGCCCG >Sequence 642

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>Sequence 643

>Sequence 644

CCGGGCAGGTACTTCAGGGCTGTGAGGAAGGGGTGCCTGGAGTTCTGCAG
GACGCGGTTCTCGGTGAGTGTGTGGGCCACCTCGTCCTTGGCCACGATGA
CTTCCTTCTTGAGGATCTTCATGGCGTAGTAGCGGCCTGTGGCCTTCTCC
TTCACCAGGATCACCTTGCCGAAAGTGCCCTTGCCCAGCAGCTTCAGGTA
CCACTCTTCCAACTCCTGAAGGAAGCTGGCTGTGCCCGTTGACTCTGACA
CCTTTCGAGTCGCCAGTTTGCAAAGCCGCTCAACAAAGCCAGGAATGCTG
AGAAGGGCCGCTTGATTGATTTCAGCTGCAGAAGGCCCCAAACTCAAGCT
CTTCTTCTGTTGAGCATTTTTTGGCAAGAAGCGTGTGCTTGTCATCATTCC
CTGTATCCATCTCTGAAAAGGTGACAGCCAGAATCCGGCAGAAATTAGCG
AGCTGCTGCTGATCGAAATTGGATACTAAGGAACTCAAATTGTGGACTTC
ATCAGGTCG

>Sequence 645

AGGTCAGCAGCAACGCGGAGGAAACGGGAGTGAACGGAGAGCGTAGTGAC
CATCATGAGCCTCCTCAACAAGCCCAAGAGTGAGATGACCCCAGAGGAGC
TGCAGAAGCGAGAGGAGGAGGAGGAGTTTAACACCGGTCCACTCTCTGTGCTC
ACACAGTCAGTCAAGAACAATACCCAAGTGCTCATCAACTGCCGCAACAA
TAAGAAACTCCTGGGCCGCGTGAAGGCCTTCGATAGGCACTGCAACATGG
TGCTGGAGAACGTGAAGGAGATGTGGACTGAGGTACCTGCCCGGGCGCC
GAGGTACCTGCAGAAGGCCTACAGGGTGCCAGGCACTTCTTTAATGTGTT
CTTTCTTTATGTGATTATTTGATTAATCTCTGCCTCCCCCACTAGACTGT
AAGCTCCCTGAAGGCAAGAATCCTGTGCTTATGCTCAATATTAGCTCTCC
CTTGGCACAGAGTAGGCACTTAACAAATGCTCCCCAAAGGGCTGAGTGGC
TGACTGAATTAAGTCN

>Sequence 646

CCGGGCAGGTACCCATCTACAAAGACCTCTATTACATAAACACTGCTTCT
TACAGGAAACAAACCTCTTCTGGGATCTCCTTTTGTGAAAACCAGTTTGA
TGTGCTAAAAGTAAAAAGTCTATTTTCCAGTGTGGTCTTGTTCAGAAGCA
GCCAGATTTCCAATGTTGTTTTTCCCCTCCACTCAGAAACCCCTGCCCTT
TCCCTTCAGAAAACGATGGCAGGCATTCCTCTGAGTTTACAAGCAGAGAC
TCACTCCAACCCAAACTAGCTGGGAGTTCAGAACCATGGTGGAATAAAGA
AATGTCCATCTGGTCTCTTCTGTTGTTTTTATTTCATATCAGATTAAATT
TCTTTACCATGTTGGCTAAGTCTAAATATTAGAGATGAGGCTGTGCCTAC
TCCCTGGCCAGCTCTGCTGATAGCCTATGATGGGTTCCAATGGGAAATGA
CTCTTTACTATTAAAAGACAAGGAAAGCTCTGACTTCGTACCTCGGCCGC
TCG

>Sequence 647

CCGGCAGGTACTGGGATTACAGGCGTGAGCCACCATGCCTGGCCAGAAA TCTATGTTTTCTTAGAACATGTGGAAGAAGGAAAAAGACAAAAAAGGAAG TCTGGATTCTGAGGACCACGTCTCACCCAGGGTGACATCAGGAATGGTGC

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## Table 3

TAGCCTCTGCAACACGACACCCAGTCTGAAAAGCTCTATACAGGGTACCT
TGGGCGGTTCTTAAAACTAGGGGGATTCCCCCGGGCCTTGCAAGGATTTC
GAATAATCAAGCTTTATCGGATACCCGTTCGACCTTCGAAGGGTGGGGCC
CCGGTAACCCAGCTTTTTTGTTTCCCTTTTAGGTGGAGGGTTTTAATTTG
CGCCGCCTTGGCCGTTAATCAATGGNCCAATAGCTTGTTTCCCTGGTGTG
AAAATTGTTTATTCCCGCTTCACCAATTTTCCACACCCAACAATACCCGA
GCNCGGGGAAGCCATTAAAAGTGTTAAAAGCCCTGGGGGTGCNCTAAAT
GGAAGTGAAGGCTATACTTTCAACATTAATTTGGCGTTTGCGCCTCAACT
TGCCCGCTTTTTCCCAAGTCGGGAAA

>Sequence 648

>Sequence 650

AGGTACCTGAGGGGCTGCTGGACAGAGCGGTAGCGATCAATGCACAGGAT
GAAGACACTGAAAATGGACGCTGTGCTGGCCACATAGTCCATGGAAAGCC
AAAAGAGGCAGAGAGGACGCCCAGTGACCATTTGACCTGCCCG
>Sequence 651

>Sequence 652

> Page 455 of 685 of Table 3

# Table 3

GCCCCGTCTCCACGCTGTGCGGAGAGGGCTCTAGCCCCTCAGTCGGACTT TTCCTTCTCCTTCATGTGCAAGAAGACGATGCTGAAGATGAAGAGCCCCA GCATTATGGAGAGGCCGNTGCGTAGAAGGGTAG

>Sequence 653

>Sequence 654

CCGGGCAGGTACCCGAGACTGGGAAGAAAAAGAGGTTTACTTGGACTTAC
AGTTCCACATGGCTGGGAGGCCTCAGAATCATGCCGGGAGGTGAAAGGC
ACTTCTTACATGGCAGCAAGAGAAAATGAGGAAGAAGAAGCAAAAGTGGAAAC
CCCTGATAAGCCATCAGATCTTGTGAAACTTATTCACTATCACAAGAATA
GCATGGGAAAGACTGGCCCCCATGATTCAATTACCTACCCTTGGGTCTCT
CCCACAACACGTGGGAATTCTGGTAGATACAATTTCAAGTTGAGATTTTGG
GTGGGGACATAGCCAAACCAATCATCTACCCCTGGCCCCTCCAAATCT
CATGTCCTCACTATTCAAAACCAATCATGCCTTTCTAACAGTCCCCCAAA
GTCTTAACTCTTTTCAGCATTAACGCAAAAATCCACAAGTCAAAGTCTTA
TCTGAGACAAGGCAAGTCCCTTTCACCT

>Sequence 655

AGGTACAGGAGCTTGAAGCCGAAAAGGGTGAGGATCACTTCTACAGAGAA
GGAGCCTCGGTCCACAAAGTCACCATTAAATATATAGGGGTTGGTCTCCG
AGGGTAAACCGTTGAGCTCGAATATGTTGAGGAGGTCATAGAACTGGCCA
TGGGTGTCCCCACATACTGTAATCTTCTCTGTCTCTTTTGAGTGTGGTTTC
CACGAGCGTGCTCAGCTTGGAGAGGACCTCTTTGACCTGTACTGAGTTTT
ATTATCTCCAATAATAATGGTCTGGAACTCAGGAGGATCATAGTAAAACC
TCCAGTGAAGGTTAAAATTCAGGCCTGTTGATTTTTCTTCGTTTTATGT
TTTCCAGCAAGGATATCATAAGGACCAACTAATTGAAGTCCAAGGCTTGC
AGAAAGTGAATCAGATGGCTTTTCAGGATCAAGTTCTTCACAGAACTTTC
AAAAGTGATAGAAATCTTCAGGTAAAGAAA

>Sequence 656

>Sequence 657

>Sequence 658

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#### Table 3

>Sequence 659

>Sequence 660

>Sequence 661

>Sequence 662

>Sequence 663

AGGTACAGAAGAGAAATTCAAACAAAATATTGCTGTTCTTCAGTTTTG
TTTGTGGAATTTGAAATTACTCAAATTTAAAA

>Sequence 664

AGGTACTTTCAGTTTCATATTACTCTAAATCCATTACAAATCTGCTTAGC

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TTCTAAATATTTCATCAATGAGGAAATCCCAGCCCTACAACTTCGGAACA
GTGAAATATTAGTCCAGGGATCCAGTGAGAGACACAGAAGTGCTAGAAGC
CAGTGCTCGTGAACTAAGGAGAAAAAGAACAGACAAGGGAACAGTCTGGA
CATGGCATCAGAGATCCACATGACAGGCCCAATGTGCCTCATTGAGAACA
CTAATGGGCGACTGATGGCGAATCCAGAAGCTCTGAAGATCCTTTCTGCC
ATTACACAGCTATGGTGGGTGGTGGCAATTGTGGGCCTCTACCGCACAGG
CAAATCCTACCTGATGAACAAGCTGGCTGGAAAGAAAAAGGGCTTTTCTC
TGGGCTCCACGNNGCAGTCTCACACTAAGGATTTGATGTGGGGGTGGGCC
CCACCCAAGAA

>Sequence 665

CCGGGCAGGTACACGTGGATGGGGCAGTCGGTCTTCTCTGGGCAGTTGTT GTTTCTCTCGGTAGTGTCCGGCGAGATGACCTCCTGCTGCTGGGCCTGGA TGGCCCCCAGGATTCCCCAGAGCAGGAGCACGGAGCAGGTGCCCTGGAGC ATCTTGGCAGCACCTGTGGCCCTGAAGTCCTGGTCCCGAGGAGGCACCT >Sequence 666

AGGTTTTTTTTTTTTTTTTTTGCAGTGAGGACTTTATTGGGGAGGTGA
CTTTGGCTTCCAGAAAAGAGGGAAGGTGGGGACCTAGTAACAATAACCAT
TTATTCCAAGGAGGCCCTGGCCCTGAACCCGGGGTTCCCACAGGAATCAG
GGAGGCACCTGAGTCCCCCAGGACCAGGCATCCCAAGGCATCATGGCAG
CTGCGTTGTTCAAAAGGAAGTTTCATTGAGCTTCATCTTGGGAGGTGTNG
AGGGGAGTGCCGAGACCGCTGGAGGCCACGGGGCTGGTGTGGGTGCCG
TCGGAGGTCTGGCCCACTCCGCACCAGTTCCTGGCAGCGTTCCACAAAGC
TGCCCCCACCACGCGCGCGGGCCTCAGCCTGCGGGGGGCTTGGGCTCCCA
CGGTGGCCAACAGGGAAGGTGTTGCTGGAGGCTGAGTGGAGGCTGTGAGG
TAGACCGGNTGAGGGGCTTTTTNAAACAGCCCCAAGGGGAGCTTTAGGAG
CCCGTG

>Sequence 667

>Sequence 668

>Sequence 669

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## Table 3

AACACACAAAAGGTTTAACCAGAAATTTTTTTTGGAAAAGGAACCCGGG AACCAATTAAAAAGGTTGGGGT

>Sequence 670

>Sequence 671

AGGTACTGCCTGCACCAGAAGATGTCTGCATTACTCATTGCTAAAAATG
TGTAGCACAGAACTGCACTAGGATTAATTTGTTTACAAGAAGAAATTTAA
ACTCTACGTTTTGGTTTTCACATACAGCAGCTCTATTGAATAACATGCATC
TGAATTTTAAGTTGCAAAGGTATCTGAATAATTTTTCATGTGCATCTTTT
GTCGAATGTTTTGGTTCAAGAAAGAATGTTTAAAGCTTTTTAAAAGACTT
CAGTTCTTAATGTAACTGTACAAAATTAGTTGTAAAAAATAACATAATTT
ACCAGTAAACCCACTCATATAGAAATGTGCAAAGCCTTTTGATATAAAAA
GTTTTGTACCTGCCCG

>Sequence 672

AGGTACTGAAGCCAGCCACGCTGCGCCCGGCCCTGCCCCGGGCCTTCCTC
GTGCCTGGGAGGTCGTTCTAGGGATGCTCCTGACCTCCGTCTCTTGGACC
TAAGATGGAATGTCCCCAGCTCAGGGATTGCCTGAACCAAGAGGCCAG
GAGCCCCCATGGCCCCAGTACCTGCCCGGGCGGCCCCCGGGCAGGT
ACAAAGTGCTGCAGTAGCCGGTGAGCAAACTCATGTGTGGCTCCATCTCG
GCTCCCTGTTCTTCCTCAGGAATCCACACACGCTTCCCAAAGCACTGTTGA
TGCAGGAAATCTAACCTGCCTATTCAGCCCATCCCTCTAACCACATCCA
>Sequence 673

CCGGGCAGGTACAATAAATCCTACAGGAATAATAACAACAGAAACATATT
AACAGTTTCCTTTGGCAAATTTAACGGAAGTGAATGCTGATGTGAACATA
GAAAAAATAATTACAAAAAACATGAAAAATGGAAACGACATAAAAGTTAAA
ATAAAGGGATATTTCTAACTTTTAGACTGATGAAAGAAATGTCTGAGGCC
ATTAAATGCAAAAAAAGAAATACATTCTCTTTAAATTATTGTGTACCT
>Sequence 674

>Sequence 675

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TACCATTTCTTAGATTGGATCACTTTTAGGATCAGCTTCGTTGTTCTTT
GCGTAGACAATGACTCTCACAGCTTTCTCCAAGTGTCCCAGAAGCACTAA
CTTACTGAAAATAGAATCTCATCAAAGCTTAACATATTCACTCTGAAAAC
AGCGGAGCTGCTGGGTCGCTTAAGGAAAGCTGAGAACCTCAAACCTGTGG
AAAGGAAAACCAGTGACCACTTGTGGCCTTATAAAGTTGAATTGCAGGTG
AGGAAGGGATCTCAAGAGGAAATCCTAATTTCAAAGACATGGGAGATT
TGTCCCTAATGTTTTATACTAGTGCTCTAGTTAAATGGAAAACCTTCCTG
GATGGGGAAGATCTGAGGCTAATCTGGATCCTGGAACTTTCATTTTGGCC
ACCACCATCTTCCTGTG

>Sequence 892

CCGGGCAGGTACAAACATCCACACAGAAGAGCAAGACTTAGAAATGGCA TCAGAGGGAGAGCAAAAGAGGCTTGAAGAATATGAAAATAACCAGCCACA GGGAGAGAATGGGTCATAAAATCAACCCAACTGGCTATCAAGAGAATTAT ACCTTGCAGAATGGCACCTTTGGTATTAGCGTACCT

>Sequence 893

>Sequence 894

>Sequence 895

>Sequence 896

>Sequence 897

CCGGGCAGGTACGCGGGTCTATATGTCAGAATACACATTTCCCACCTTGC
CCAACAGTAGAAAAACATAAGAAGAGAAAAACATTAAAAAATGACAAGGA
AGTTAATGGAAGTCAGCAATGTGATGGTGTTTGGAGGTGGAGCCTTCAGA
AGGTAATTAATGCCCTTGTAAGAAGAGGCCAGAGAGCTTGCGCACCTTCT
TCCTGCCATGTGAGGAGCCAAGAAGCCGGCTGTCTGCAACCTGCAAGAGG
ACCCTCACTAGAAGCTAGCCATACTGGCATCCTCATCTTGGCTTTCCAAC
TTCCAGAACTGTGAGAAGTATATGTTTGTGGTTTAGTCAATGGTCTATGG
TAATTTTT

>Sequence 898

AGGTACGCGGGGACGCGCGTCTGTGGAGAAGCGGCTTGGTCGGGGGTGG

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#### Table 3

>Sequence 900

AGGTACGCGGGGGTGGCGCCAGGGATTTGAACCGCGCTGACGAAGTTTGG TGATCCATCTTCCGAGTA

>Sequence 901

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TCTAATTTCTTTTGGTGCCATTTTAGTAACTTAACAATTGCTTTAATAGA
CAAAACTCAATCATGCATGATCAATCACAGGTGAGAAAATAGAGGCGTGC
TTACTAATGGCAGCAAAAGGCTTCTGTGGGGGTGTGCGGGATGGAACAGC
TAGCTAGCTAGAAAGGGGCTTCTTTATAGAGGGACTCCAGTGTCAGGCAG
GGGCACTGAAATCTAGGGGTCACCAAGGGCCACAGCACAGGGGACTGAGG
GAGAATCCAGTGGCTGGAACTCTCCTCACCAGTCACCTGCCTTCAT
>Sequence 902

>Sequence 903

AGGTACGCCACAAGAGGGTAAGAAATTATCGCATGGTCTAATACCAAAT
TTTCCCCCAAATAGAACCTACCAAGAGATCGAGCAATCAAAGCGTTATCT
GTCAAAGCAATTCGCTTCTTATTGATTTTGCCATAACCACGCTTGTAGAT
TAGTTCATTTACTGACTTCAGATTGGGGTACCTGCCCG
>Sequence 904

GGCTTCNAGTTACTCCCCCAAGGCTGGAAGAGNGACNCACCCGCGNGGCG
GCCGAGGNACGNNACNCCGCTTTTCAGAGNAGANNACGCNNACGCCCCC
CACGCCCNAACNNGGNCCAGAAGCTTTTCNCCAAGCNCCCAGCCNGCCCC
ACAGAAAAACGANNNCNCAGCCCNGGANAGGNNCCCCACAGANCNGCNCA
NCAACNCNGGCNCCNGACCCNCNCTTTTTTTTTGACCGCGGCCCANNCCCA
CCCCCAGCGAAAGGGACCACAGCNNCCACNANGGCAAGGGNNNAGGAAGG
NCCAAAGGGCNCNNCAGNGGAAGGCNNCAGCNGCANCGNAANNN
GNGNGCCNNCNCAGNNNAGGGGCAAGNNAAAGAGCANGANGAANGNNNGA
AG

>Sequence 905

CCGGGCAGGTACTCCCTCCAGACATCCGTATATTGGCCTGGGCCCCTGTAGACCAAGCTTCAGTGCTAGGTTCAGCTGCCTTGAGCGGACTTACCGCTATTTTTTCCCTCGTGCTGATTTAGATATTGTAACCATGGATTATGCAGCTTAGAAGTATGTTGGCACCCATGATTTCAGGAACTTGTGTAAAATGGATGTAGCCAACGGTGTGATTAATTTTCAGAGGACTATTCTATCTTGTTAAGTACCTT

>Sequence 906

> Page 461 of 685 of Table 3

#### Table 3

GGGGAGTAGTGGATGTCTGCAAAAACCAGAAGCGGCAAAAGCAGGTACCT >Sequence 907

CCGGGCAGGTACAAAGTGAGGAGGCAAGACAGGTGCACAGAGCATAGCTT TGTCCCATCTCAGGAACCCTGGGTTCCACCCCAGCTCCTGATCCCAAGAG ATACGTTTCCCGGGACTCCAAGGGAGAGCTGAAACACTGGTCAAGCTCAG AGCCCTGAAGCTCTTTCCCACTCCCGCGTACCT

>Sequence 908

AGGTACTTAATGAGGCTGTATTAAGGAGAGTAACAAGTTCTAATTCTTGA CCCATCAAATTCTTAAGGTGAAGCTGAGGACCAGGAAGAAGAAGAAGATG CTGAGAAAGAAAACATTGAAAAAGATGAAGATGATGTAGATCAGGAACTT GCGAACATAGACCCTACGTGGATAGAATCACCTAAAACCAATGGCCATAT TGAGAATGGCCCATTCTCACTGGAGCAGCAACTGGACGATGAAGATGATG ATGAAGAAGACTGCCAAAACCTTGAGGAATTTATCTTGGCTGAGCCAAAT GCCCAAAGGGGATTACCCCTTTTAGCCCCCA

>Sequence 909

CGGCAGGTACGCGGGGGAGTCCCCTCGCCAGATTCCCTCCGTCGCCGCC
AAGATGATTGTGCGGGGCGCCCCCCGCACGCAGCCGCCACCGCCGAGA
CCCAGCACATCGCCGACCAGGTGAGGTCCCAGCTTGAAGAGAAAGANAAC
AAGAAGTTCCCTGTGTTTAAGGCCGTGTCATTCAAGAGCCAGGTGGTCGC
GGNGACAAACTACTTCATAAAGGTGCACGTCGGCGACGAGGACTTCGTAC
CT

>Sequence 910

CGAGCGGCCCCGGGCAGGTACAGAGGTTACCCAGTGTTGCATTACTTT
TAAATGATCTTAAGAAGCATACAGCTGATGAAAATCCAGACAAAAGCACT
TTAGAAAAAGCTATTGGATCACTGAAGGAAGTAATGACGCATATTAATGA
GGATAAGAGAAAAACAGAAGCTCAAAAGCAAATTTTTTGATGTTGTTTATG
AAGTAGATGGATGCCCAGCTAATCTTTTATCTTCTCACCGAAGCTTAGTA
CCT

>Sequence 911

AGGTACCACCCATGTGCAGGAGACTGCAAGGAAGCTGTTATTCAAAGGTA GAACAGTCAGCCTTGTGCTTGAGTCCTGCTTTTATGCTTGCGTGTTTCAT AACAAAACACAGAGGCAAGTCTTCATATCAGCACTTAGTCTTGATATTCC AAGTAGCTGACTACTTGTACCTGCCCG

>Sequence 913

>Sequence 914

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TTGCCAGACTGGAGTGCAGTGGTGCGATCTGGGCTCACTGCAATCTCCAC
CTCCCGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCGAGTAACTGGGAC
TACAGGTGCGCGCCACCAAGCCCAGCTCATTTTTGTATTTTTTAGTAGAGA
TGGGGTTTCACGATGTTGGCTAGGATGGTCTCGATCTCTGGTCAGAGTCT
TTTCTGTAAATATCCTTGGTAAAGAAGCAATTTTAGACTGTAGCTGTTGC
AAATGCTTTAAGGAAGAAGCAAAACAACTGTCAGTA

>Sequence 915

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TCCAGCCACAGAAATATTCAAGAAGAAGGTGTAAATATTGTTTTGCCTAA AAGTAAATCTCCCCAGATGTGGACAAAATCACTTTCCAATACCCAGTTTG CTTCCCTGGCCAATCTTAGGGCAGAGAAGATTAAGGTGGTGAAACCATCT TCTTTT

>Sequence 916

TTTTTTTTCCTTTTTTTGTAAACCTATTTATTGGTTTGCGGAAAACACT
CATATAGGTCGAATTGGAGACCCCCGCGGTGGCGGCCGAGGTACAAAGTG
TCTTTATGTCCTGTGTTTAACCCCTTAACATACAGAACCTAATTTTACTG
CATTTTAATGTTAATTCTCCACTCGAAGGTGAACATGGGATGTTTGTAAC
ACATATTGTTGCTTATCAAGCACACATATGACCCCCTTTCATGAATATTC
ATTAGTTCCCCCTGTGACCCTGTTGAATATGTCTGTTTAGCCAACCTGTT
TGGGATAAAACTCTTATCCCACTCTATTTTCCTCAAAGTCCCTGCCCGCC

AGGTACACTTTGCCTGCTCCAGCCCTGGAATCAGCCATTGCTGCTGTGCT
ATCCTTGACAGAACTATAACCTGAATTTAACAAGGAGGAAATATCAGGCA
AACACAAATGGAGTGACATTCTAGTAAACAACTGATCAGTACTCTTTTAAA
AATGAAAGACAAAGAATGACTTGATGAATGAGTTCAGATTAAAAGAGACC
AAAGGACACGCTACAACTGTAACTTGAACGCATGACTGTTGGCTGCGTTC
TTGCATTGGAAAAAAAGTGTTACTGATGAAATTTGAATTTCGTGTCTAGAT
TGAGCAATTAAGCAATAATTTTGTTATAAAATTGCTTTATTGGGTCATTAG
TTTT

>Sequence 918

>Sequence 919

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CCCTGGATGGAAGTATCAACTTGGAAGTTACTAGGAAAAGGTAAGGGAAC
TGACTGAGGACACTAGGCTTACCTTTTAATTTCGAAGAGATAACTGGATTA
TTTCAGGTTGCTACGATTTCTGCAAACGGAGACAAAGAAATTGGCAATAT
CATCTCTGATGCAATGAAAAAAGTTGGAAGAAAGGGTGTCATCACAGTAA
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>Sequence 920

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CCTCATCTCCAATATGCCTGGTCCGACCCCCAGTGGCACTAACGTGGGAT
CCTCAGGGCGCTCTCCCAGCAAAGCAGTGGCCGCCCGGGCGGCGGGATCC
ACTGTCCGGCAGAGGAAAAATGCCAGCTGGGGGACAAGGAGTGCAGGCCG
CACAACCTCGGCAGGCACCGGGGGGGGTGNGGCGATTCTACACAGAAGATT
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GGGCCGG

>Sequence 921

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>Sequence 922

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> Page 463 of 685 of Table 3

### Table 3

AGGACTGCCTCTTGTAGTTTAAGTTCCAGCTCAGATGCAGTAAAATAGAG CATGCCGGTAGATTTCTAATATTTTTCACTTAAGTCCCTGGCTCCTGGAA

A . . . .

>Sequence 923

**GTAACCACT** 

>Sequence 924

>Sequence 925

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>Sequence 926

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ACTGAAGCATGGTGGGGATCTGGCACAAGACCCAGCCTGGACAGAGATCT
TTGGTGTTCTCTCTGTGGCCACCATCAAGTTTGAGATGCTGAGCACAGCC
CCACAGAGTCAGCTCTTCCTGGCTCTGGCTGACAGCAGTATCTCCACGAA
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> Page 464 of 685 of Table 3

CACGAAGGCACAAAGAGTGGCACCTTTGTCATGTATAATTGTGCCCGTC TTGCCACACTCTTTGAGAGTTACAAGTGTAGTATGGAACAAGGTCTGTAC CT

>Sequence 928

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>Sequence 929

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>Sequence 930

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>Sequence 931

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>Sequence 932

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AGGTACCCCGGGGCTGGCTCCTCCAGTGTCTTCTCAGTCCTGAGCAACAG TGCAGAGGTGAAACGGGAGCGCCTGGAAGATGTGGTGGGAGGCTGTTGCT ATCGGGTCAACAACAGCTTGGACCATGAGTACCTGCCCG

>Sequence 934

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>Sequence 935

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## Table 3

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>Sequence 936

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>Sequence 937

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GACATCCAGACCTCAATGCCCTGACTCAGCCCATGGCAGCGACCCCTTCA
AACAGGCTCCATGTGGGCCTGTAATCAGGAAAGACTAGAGCATCCAGGAG
TGGAGATTTGATTCTGAGATGCTGGGAGTTGTTCCTGGTTCTTGCTCCTG
TCTGGCTGGTGCTGACAGCCAAAAGCGGGGAGTTGTTGTGAGCTTTGTCCT
TCAGCACTAGAGGCTTCACTCAACCCATGAGAAGGGGATGCCCCAGGCTT
GCCCATCACAAGCACTGGCCAAGCTGACTCCCCGCTGCTGAGGGAAAGAG
AAAGAAGCCAAGGCTGCTCAAGTCAAAACACCTGCTGGCCAGGCCCAGT
AATGTGGGGTCTGTAATCCTAGCTACACAAGGAG

>Sequence 938

AGGTA

>Sequence 939

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>Sequence 940

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>Sequence 941

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>Sequence 942

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AGGCACAAGATATAATGTCATAAGAGCAGGACAGTGGCTCACCTACAGTA
GTTCCCTATANGGGGAAAGAAGGGCAGGAAATAGGGCGCAGNGGTCTGTG
TCCTGTCCCTGCANCCACCCTGAGCNAGCTAGTCTTGGGAAGGGATTACA
GGCCCTGGGCCATAGGCTGCTCGCCATTCTGCTTTCCT
TCCCTGTGCTGCTCCCTTTTAGCCAGGGCTGAGAAATGTTCAGCACCTGA
GGCAAAACTGCCATAGTACCT

>Sequence 943

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TGGTCCCGGTGGAATGCCTTGCCAGAGCAACGCATAGCATGCTCCCGAGA AGGATTAACACTGGCTGAACATCGGGAAGGAACTGGTCCTTGAAGTTCAG ACATTTGAAGCTTGTCAAGACTTGTCTATGGAACTTGGCCCCTCCATGTG AGTGGAAGCATGGGCTGATCACCC

>Sequence 944

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ACCTCCACAAGGGCTCATCACGGTGGTCAGGGCGAGGGCCCCCAGCATCA
GAGCTTTGTTTAGGATCATACTCTTTCCAAGGCAGCCTCAGCAGTTGCTG
TTCTGAGCTGTAGAGCAATTGTCCCCGCGTACCTGCCCG

>Sequence 946

>Sequence 947

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>Sequence 950

AGGTACCAACAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCAATGATTC ATCCGACAGGGCCACTGGCA

>Sequence 95

GTCAGGGACCCCGGAGGCCCGATTAGAACCCAAATAGATCAGGAGCTGTGGAGACTGCCCTGGCTTCTGCAGGTACCTGCCCGG

>Sequence 952

NGCAGTGNGACTNAATGCGANTNGGCGCTCTACCGCGGNGTCGGCCGAGG ACAACTTTGGATTGTCAATTAAAGCTTGTTTGTGGATACTTATCAAACGT TTTTGTGTCTATTTAG

>Sequence 953

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# Table 3

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>Sequence 955

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>Sequence 956

CCGGGCAGGTACTTTAGATGCAAAGTTTTAGATGTTTGGTATTTGAATGGG ATACAAAATTGGGAACTTGGAATTTGGGTTGAGACATCTTTCCTATGCAG >Sequence 957

AGGTACGCGGGGAGGAATTAACATACACTAACTTTGAGGAAGATGTGCTC ATATACATTATTTTTATAATTCAGTCATATGAGGCATTTTATTCACATCC TACATGAGGAGATTGAGAACAAAATATGTAATGTAGATTCAAGTTGCACA GTGAGTGAGGCCAGAGTTCATACCCCAGTCTCGTGGTCTTTCTGCAGCCT CATGATAGAGCAAGGATATTGTCACCTGAGAAACCAACATTGAACCTCCT TCTCTGAAGCCCAGTGAGTGCCCTTCCTCTAGACTCTGGCCACAGCTGGG CCTCCCTCCATCAGCCCACATAACTCATTGCAGTGTGCTTATCTGTTCAC TACTCCTTGTCTTCAAAGGAAACTCCAGAATTGTAATAGCTGTATCCTCT TCATCTCTGAACCTCCAGGACTTCAAAAGAAGTGACTGGACGTAGTAGGT GCCTGGGAAAGGTTTTTGAATGAATGTTTGAAGACAGCATCTAGGTGTCC AGCTCCTAGACCTTTCTTTGAGCGACAGTGGGTCTCAGTCTCATCCATTC CCCTTGAGTCTCTCTCATTAAGACTAATGTTTTCCCAGCTCACCAAACT TGCAGTCTTCTGGGATTCTCTGCTTCCCCCTATTATTTTTCACTAATCTA AGGGGCTGCTTCATAAGCCTTCACAAGCCCTTCTGCAGGTCAAGCTATTT **AAACCCTTCA** 

>Sequence 958

TTTAAT

>Sequence 959

>Sequence 960

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TTTCCAACAAGACCCGGGGGTTTCCGCCTGTAAACAACATGTTGCGCCAC
AAGCGCAGGAAATGGCAAAAATCCCCCTAAAGGCCCCGGGGGTGGAGCTC
TTCCAGGGCTTCAACCACCCCGGCGGTCCCCCCT

>Sequence 961

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#### Table 3

AGACATGTCCTAGTGCTGAGCTGGGGCTTGGAAGCCCAGGGACTTGGGGG CACGCTACCTACTGAGACCC

>Sequence 962

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>Sequence 963

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>Sequence 964

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>Sequence 965

CCGGGCAGGTACTGTCTTGTTTTCCCTCTGATAGGGTTTGGATCTGTGT CCCCACTAAATCTCATACTGAATTGTGATCTCCAGTGTTGAAAGTGGGGC  ${\tt CTGCTGGGAGGTGATGGGGGATCATGGGGGGTGGAGTTCTCATGAATGGTT}$ ACCACCATCCCCCTTCATACTCTCTCTTGCTCCAGCTCTGGCCATGCGA TGTGCCTGCTCCCCTTCCCCCTCCACCATGATTCTAATTTTCCTGAGGC CTCCCCAGAAGCTGAGCAGATGCCAGCCATGCTTCCTGTACCT >Sequence 966

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AAAAGAAAAAAAAAAAACCAGAAGAGCAAGGGAAGGCTCACAGGGCTGA ATCTTGAAGAATNGGGGGTTCTCAGGGTTACAGAGAAGGGGAGGACATTC TGGACAGAAATGGAATGTGTGAAGATATTGTGTACCTGCCCG

>Sequence 967

AGTTGGATATATAGATACGCTTCAAGCGCCGGGGGGGAGGCACTTCTTCTA TTGGGCACCTATTCCCGTTTCTTCGGTCACTGACTCAATTGCGCTTGGCT CTACAGGATAGAGGGAGGCGGTTTTTGTTTCACTCAAAGGCGCAAATCAC GGGTATTCAACGGATTTTTGGTATAACGGCAGAAAATACATTGTGAACTA AAAGGGATCTAAAGGGGCACGATCCGCAATAGGGCCGGGTGCTGTGCGTT TTTCAAAGGCATCCCGCCCCTTACGAGT

>Sequence 968

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>Sequence 969

CCGGGCATGTTACTTTTTCTTTTTTCTTTTTTAAGATTATNAGTANA ACCCGGCAGATAGGTAGGAGTAGCGTCCCAAATGTCATGAGTGTGGCGAG GAATGGGGTGGATTACCCCCCTCCACCCCCTATCTTTCTCGTGTCCAGAG

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>Sequence 970

>Sequence 971

>Sequence 972

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>Sequence 973

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TGGGGATGAAAAGG

>Sequence 974

AGGTACTCAGAAGTGTCTCTAGGAGGCTGGGCCAGTTTCCTCTTTTTCT GCAGGCGTCTCCAGAGCACCCTCTCACCAGCTGTATCTACTCACAATCGT CTGGCATTTGGAATCTGGTTGAGTTTGGGTCCCTCAATACCCAGAAAATA GAGCCTCCAGGACCCGCCCCTAAGCAGGAATTTTTCAGATCTCCCTTCTG GGTCCTTTGGTCCCTAAGTCTCTGGCTTTGGCATTCCTGGTGGGAATCCT TGCGGAGAGCCATCCTGGTACCTGCCCG

>Sequence 975

CCGGCAGGTACAATTTAATACATTAATGTAGTAAGTTATTAACTGGTGCC CCTATGATCTGCGAGAGGTAATACACTATCACGTGTTCCAAATTTTCACA GGAAAAGAATCATAGAATCCTATAACTGAAGGGGGCTAAGCGGGATCTAC AAATGCCTGCCAGGTGCTTGGATATCCTCCATCACATCCAGCCATGACAA GTTACTTGTCATGGTACCT

>Sequence 976

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TACCAAGTATCCCCCTCACTGTCGTGCGGAGGGGACCAAGGGTGNNGAGA
TCAAACGAACTTGTGTGCTTGCACCATCTTGTCTTCATCTTTCCCGCCAT
TCTGATGAGCAAGGTTGAAAATCTGTGAACTGGCCTCTTGTTGGTGTGCC
CTGGCTGAATAAACTTCTATCCCAAGAGAAGGCCAAAGTACCCTG
>Sequence 977

CAAAATCTTGGGCATACTTTTTTTCCTGGGAGAAATTTGTTTACCCCTAC
AAAATTCCCAAACATAATTACTAGCCCGGAAACTTTAAATTTTTAAACGC
CTGGGGTGCCCTTATGTAGTGGGCCTAACCTCCCATTATTTGGCGTGGCC
CTCATATTTCCTGTTTTCCAATCGGGAAAACCGTTTGCGGCGCCCCTTTA
TTTATTTATTCGCCGCCAACCCCCCGTGGACAGCGGGTCTNACCGATT
ATTGGCCTCTTTTTCACCTTTTCTTACTTTAATTAACCAANATGCCCAAA
ATCTCTTGTTTATGAGAAATCGGTTTATTCTTCTTTTTAAGAGGCTGTAT
ATCTGGTTCTCCCTAAAATAAGGGTTTATTCCTAGATAAGACACATTTGC
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TCTTAGGTCCACC

>Sequence 978

>Sequence 979

>Sequence 980

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#### Table 3

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TTTCTACAAATTGTAAGCGGAAATGCCTTTTGAGTACGCGGGATTTGGAT
GATTGACATAAGGTTTTTAGCATGTTCCTCCTTTTCTTCACCCTCCCCTT
TTTTCTTCTATTAATCAAGAGAAACTTCAAAGTTAATGGGATGGCCGGAT
CTCACAGGCTGAGAACTCGTTCACCTCCAAGCATTTCATGAAAAAAGCTGC
TTCTTATTAACCATACAAACTCTCACCATGATGTGAAGAGTTTCACAAAT
CCTTCAAAATAAAAAGTAATGACGAACTACATAGACATCGAAAATAAAGT

>Sequence 982

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>Sequence 984

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>Sequence 985

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>Sequence 986

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>Sequence 987

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>Sequence 988

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# Table 3

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>Sequence 989

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>Sequence 990

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>Sequence 991

>Sequence 992

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GATAATCTATTGCTTCATCTTTGTCTGTATCAAATAGTTCAAAAGCATCT
TTAATTTCTTGTTTCTGTCCTCAGACAGCTCTCTGAATATCCTCTTTGTT
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CAGAGACGTTCCTCTCAAGAACGATTTTAACCCCC

>Sequence 994

CCGGCAGGTACTTTCTAGAAAAGCCTACATGTATATACTTAGTTACAGC TGCACTTCCCCATTACTTATTTTTAGGAAGGTTATAGAGATGGAATAGAT AGGTCACAAGTCATTATAAACTATGGACGACTCCGAGGAACATTGAGGTA ATTTTTAAAGTCTAAATGCTGAATCATTTTAACCTCAATACTACTGGAGG ATGTTTCTGTATAAATAAAGTGTTTAAACTGAAATGCTTTTCCTGGTGCT AAATACACTAAAGCGTGTCGCAGATCATAGAATTATATTGCCTTCAAAAA GGCAAAATCTTTTATCACCTCATCTACTTTAATGTGTGAACTACATATCG CCTTTTCGTGCACAGAAATGGTAAGAAGATGTATACTTCTGCTACCTGAA CAATTATCTATCTCATTGAAAGGTCTTCAGATTTTGAATAAAACTTGTAG TACATGGCAAGAAAGAAATGGGCAAAAACGGGCAATGCTGTGAGAGCCAT TGTAAGACTGTCCTCTATGGCAATGGATCTTCAGGCTCAGTGGCAGGAAA ATCCTAACAGGGTCACCACCCACCCGCTTCATGGCGGAAAACTAGAATTC TGAGAAAATGGGTCCAAGCTTTCTTTAGCTTGTGCTGAGGAAAGACCTAT GTAAAACCCTATTTCTCTTAGAACATTGCGATTTAAAATTTGTGAGGGAA ATGCTGCTAAATTGACTGCCAATTGAAGGTCCCAAACCCGAGGTGTCTGT TCAAAAGACACATAAAACGGGTCG

>Sequence 995

CCGGGCAGGTACGCGGGGTTTTTAGCTTTTTAAATCTGCTTTTGGTATACT CCATAAAGTTTGTGCCATTGGATTATTCTGTTCCTATAGAAATCCCCACT ATAAAATGTAAACCAGACAAACTTCCATTATTCAAACGGCAGTATGAAAA CCACATATTNNTGTTGGCTCAAAAACTGCAGAATCCTTGCTGTTACGGTC

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### Table 3

ACACCCAGTTTCATCTGTTACCTGACAAATTAAGAAGGGAAAGGCTTTTG
AGACAAAACTGTGCTGATCAGATAGAAGTTGTTTTTAGAGCTAATGCTAC
TGCAAGCCTTTTTGCTTGGACTGGAGCACAAGCTATGTATCAAGGATTCT
GGAGTGAAGGCAGATGTTACTCGACCTTTTGTCTCCCAGGCTGTGATCAC
AGATGGAAAATGCTTTTCCTTTTTTCTGCTACCAGCTAAAATACTTTGGCAC
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ACCT

>Sequence 996

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>Sequence 997

>Sequence 998

AGGTACCAACAGAAACCTGGCCAGGCTCCCAGGCTCCTCAACTATGATGC ATGCAACAGGGCCACTGGCA

>Sequence 999

AGGTACTCAGCCTGGTCGGGTGGCAGCTCGCGGCGCAGCTCGTCCATGGT AATGTAGTTCTTGTCCCCAGCCAGGATCTTGAAGGAAGCCATGACTTGGT CTGCTGTATCTGTGTCGGCTGTCTCGCGGGACATGAAGTCAATGAAGGCC TGGAATGTCACTACCCCCAGGCGGTTGGGGCCCACGTGGCATCGATCCTC CC

>Sequence 1000

TGAGCGCTCTTGNGGCAATCTTACGGCACTCGGTGGCGGCCGAGTGTGGC TCTTCTGGTGTTTCAGCTTGGGGAGAGAGGAGTGGCCTTCCTCTTGCAGT TGAGGCCGGCCGAGCCGGACTTCAGCCGGATCTCGTGGCGGAGCCCAT CTTGCTCCCTCTCCCAGGCCTNTATCCGCTCCCTAGGATTCCCGGGCCCT GTAGGTGGGAGTTGGGAGACACACTACCT

>Sequence 1001

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>Sequence 1002

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>Sequence 1003

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ATTTTGAAAATCTACGTTGTACGTGGGATACAGGTCACGGGCAGAGCTCC
TGGCCTCAATGATGCCTCCTGATCTATCGCTGGGCCTGGACGACCAACAC
TGGGATGATGACGAGCAGAATGGTCATGAAGATGCTCAAAATCAGGGCCC
AGATGTTCAGGCACTTGGCGGTGGAGGCATAGGCCTGGGCCCCGGTCACG
TCGCCAACCATCTTCCTGTCCCTAGACTTCACGGAGTAGGCGAATGCTAT
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CGACATGTCAGGCACCGAGGTCTTGCTGCGGATGTGGATCACGGGG

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# Table 3

>Sequence 1004 CCGGGCAGGTACATTCTCTGAAGAGGAAGCAGCTGGTTGGACAGGATTTC TTGAAGAGCCAGGTGCTAAGGGCATCAGGTCGACATCCATAGTAACCATG TGCCATAACATCTACACATTTCCACTTGTTTTACAGACAAGGTAACAGGC AGAAGGAAAATCCAGAGTCCTGCAGTAAGCAGATGACAAAACTTCAATAT GCTTGGGCACCACTTAGGTGACCCCAGGGAGATTTAGTGTGGCCTTAGGA AAGCAAAAGAGCACTTTTTATTGGAAATATGAGCTTGTCACTGGGAAAGA TTGGAAGATCCTCTTTCCCTGGCTGTATTGTAGTGTTTGCTATTT >Sequence 1005 CCGGGCAGGTACAACAACCCCTCAAGAAAGGGCCAAAAAGGCCCCGAGT CACTTCAGGTGGTGTCTCAGAGTCTCCCAGTGGATTTTC >Sequence 1006 CACAAAACATACAGGCAGATTTGTATTCTGTGAGTTTCTCACACCCTCAC ACTTGTTCACCAATCTTTAAGATGAAAAACTCTTTTCCAAAATGTATTCA GCCACCAACAATGGTGTTATTAATAGGAATATGGATCAATTTCACAAAGA AGCCAATGAATCCCATTATAGCAAATCCTATTGCTGTTGCCATGGCAATC TTCTGGAATTCTTTTCTATCAGGTTTTAGTGCCTTCTTTTAACCAGCCGA ATGGAGTCCTTTACAAACTGCCGACTTG >Sequence 1007 CCGGGCAGGTACCAAAGACTTATGAATAGATTTATGAATTGGAGTAGAAA ACATAGACATTTCTACCTTGAGGATATAGAAGGGAACTTAGGAAGTGAGA **AGTCAGATTACCCTAGTCC** >Sequence 1008 CCGGGCAGGTACAATTTGATCAAGCTATTAAAAATGCTATAAAAATATTAC TCGGATATCTGTTTCTGATGATCACGTGACATCTAGCATATACGTCTGTA GGAAAAGGGAAAAAGCAAACCCATTTCACAAATGGCTAAAGTCAATCCCG **CGTACCT** >Sequence 1009 CCGGGCAGGTACATCTTCTTCCGGCTGATAATTGCATTATGGATGAACAC AAACGAGAAATTGCGGAAGCTAAGCAAATTGTTAGA >Sequence 1010 AGGTACCATGATGATGACCTGGCAGATTTGGTCTTTCCCTCCAGTGCGAC AGCTGATACTTCAATATTTGCAGGACAAAATGATCCCTTGAAAGACAGTT ACGGTATGTCTCCCTGCAACACAGCTGTTGTACCTGCCCG >Sequence 1011 CCGGGCAGGTACTGTAGGATAAGGAGGAAGGCAGTAAAGCTGCAGTATGT CCTTGAAGCGTGTCAAAGTGGTATGGTAAGGAAAAGGAGAGTTTTATCTC ACAAAGCCATAAACACTAAACAACTTAATTTTCCATTCCAGAAAATCAGC

AGTACCT >Sequence 1012

AGTCATCAAGACAGCACTTGGTAAAACATTTAAGATTTGTGATAATAACA

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### Table 3

AGGTACACCAAGGCGACCACAGCAGCTGCAACCTCAGCAATGAAGATGAG
GAGGAGGATGAAGAAGAACGTCACGAGGGCACACTTGCTCTCAGTCTTAG
CACCATAGCAGCCCAGGAAACCAAGAGCAAAGACCACACGCCGGCTGCG
ATGAGGAAGTAGCCCACGTTGACAAACTGCATGGCACTGGACGACAGTGG
CCCGAAGATCTTCAGAAAGGATGCCCCATCGATTGACACCCAGATGCCCA
CTGCCAACAGGCTGCACCACACAGAAAGATGAGCAAATTGAAGAGGATC
ATCATGGTCTTAATGAAGCTGAAGCACTGCATGGTGGCTCCTGTTCAGGG

>Sequence 1014

GGGAAGGTCAGCGCCGTAATGGCGTTCTTGGCGTCGGGACCCTACCTGAC CCATCAGCAAAAAGGTGTTGCGGCTTTATAAGCGGGCGCTACGCCACCTCG AGTCGTGGTGCGTCCAGAGAGACAAATACCGATACTTTGCTTGTTTGATG AGAGCCCGGTTTGAAGAACATAAGAATGAAAAGGATATGGCGGAGGCCAC CCAGCTGCTGAAGGAGGCCGAGGAAGAATTCTGGTACCT >Sequence 1015

>Sequence 1016

>Sequence 1017

>Sequence 1019

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### Table 3

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>Sequence 1020

>Sequence 1021

>Sequence 1022

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# Table 3

TTTCCCCCCTTTTCCCTAAAAAAAAAAGG

>Sequence 1026

>Sequence 1027

>Sequence 1028

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# Table 3

>Sequence 1030

>Sequence 1031

>Sequence 1032

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# Table 3

>Sequence 1033

>Sequence 1034

>Sequence 1035

>Sequence 1036

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# Table 3

>Sequence 1039

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GCAGAACCATATGGAAGCTGGGCCTTCATGTGGCAGCAAGTTTTCGAGCC
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AGGATCTTGAGAACGCCCAGTTCTCCGAAATCCAAATGGAACGACAGCCC
CCTCCCTTGAAGTGGCTACCTGTTGGGCCCCACATCATGGGAAAGGCTGT
CAAATAATCTTTCCCAAGCTCCAAGGCACTCATTTGCTCCTTCCCCAGCC
TCCAATTAGAACAAGCCATCCACCAGCCTATCTATCTTCCACTGAGAGGG
ACCTAGCAGAATGAGAGAAAGACATTCATGT

>Sequence 1040

AGGTACGCGGGGAGCCTGCGGAGTTCGAGACCATGCTGCTGTTCTGCCC CGGCTGCGGGAACGGGCTGATCGTGGAGGAGGGACAACGCTGCCACC >Sequence 1041

>Sequence 1043

ACGAGGATGCTTGGCACGTACAGGATCTTGCCATCACCTGTTCGGTCAAACAGCCTGGAAGGCCTCCTTGAACTCTGCGGTCTGGT

>Sequence 1044

> Page 481 of 685 of Table 3

# Table 3

>Sequence 1045

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>Sequence 1046

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AATGCCCCCCGCGTACGCGGGGCCCGCGGAGTATACACCATGAGCAAAGG
TTAACCCTCCCAAGTTGAAAAAATTTATGGACAAGAAGTTATCATTGAAA
TTAAATGGTGGCAGACATGTCCAAGGAATATTGCGGGGATTTGATCCTT
TATGAACCTTGTGATAGATGAATGTGTGGAGAATGGCGACTAGTGGACAAC
AGAACAATATTGGAATGGTGGTAATACGAGGAAATAGTATCATCATGTTA
GAAGCCTTGGAACGAGTATAAATAATGGCTGTTCAGCAGAGAAN
>Sequence 1047

>Sequence 1049

>Sequence 1050

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CAATGCCATCCACTTTAAAGAGGTCTTTCCCTTTAACCACAATAAAGGGA
TTTCCTTGAGGCAGAACCCACCCCTTTCTTGGAAGACTTTTCACCCTTCC
CATTTTTCTGGACAAACACCCACCCGGGGCCAATACCAAATTGGGTCTAT
TGGTTTTAAGGGTTCTTCTTCATGGGAAAGTTTTTGGGGGAAAGTAAATTT
AGGAAATTGAACTCAATAAATAAAAAAGGCTTTTTATATTTTTATATATC
TATTATCTAAAAAAAAAGTGG

>Sequence 1051

AGGTACCCCAACATATATTTTTACGAGGGTTATTTTGATCAGCTTGTGTA
GTCAGTGCCAAAGTATTTAGCTGGTAGCAGAAAAAGGAAAAGTATTC
>Sequence 1052

CGGGCATGTGGCCGCCCGGGCAGGTACTGCTAGTGCTATCGGTTGAATAA ATAGGCTGATAGTTTCGATGATGATTAGTATGGGAATTAGTGAGATGGGG GTTTCTTGCGGTAAGAAGTGGGCTAAAGAATTTTTTTAGTTTGTTCGTA AAGCTTAGAATTACTGCTTCCTGTTCATAGGGGGATGGCTATTGCTTAAT GTTTATAAGATAGTTTGATATGGTTATGGTTAAAAATTGTATGGTTGACA

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### Table 3

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>Sequence 1054

>Sequence 1055

>Sequence 1364

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>Sequence 1366

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>Sequence 1367

>Sequence 1368

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AAGACATACTTCTCAGCTGCAAATATTAATGGAGAATTGGGGCACCCACA GGAATGAAGAGAAAGCATCTTCCTAATTTCAAAACCATTTTGGTACCC TGCCCGGTCGGGCCGTCTAGAACCAGTGGATTCCCCTTTCTGCAAGAATT CCAATTTCTTTCTTATTCATACCCTTTTTCCTCGTGGGGGGTGTCCCGGT TCCCAATTTTTGTTTCCTTTAATTGTGTTTTATTTTCCCCTTT >Sequence 1369

>Sequence 1370

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>Sequence 1372

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ACTCTCCTCTTATCCTTCAGTTATTTTCACAAGGGGCATTGTGACATATT
GCTGGACTGGGAACCCAGGTGATGTGACTCTCCTCTACTGNCTGAATACA
ACCAAAAAAAAAATAAATAATAAAAAAGTCCCT

>Sequence 1373

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>Sequence 1374

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>Sequence 1375

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>Sequence 1376

>Sequence 1377

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CCGGGCAGGTACAACTTTAAACTGTATTGTATTCATGTTGCTAAACAATA
TTGGCCTTCTCGATGATTTTATTCATGTTGCTCCAAAGTTAAAACCCTGT
AGAACTAAGTAGGTGAAGAGATATTTTGTATAAGTGCCACAGAAGAGAAA
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CCACTGGTA

>Sequence 1379

>Sequence 1380

>Sequence 1381

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>Sequence 1382

>Sequence 1383

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TGGTGCATCCACCAGGGCCACTGGTA

>Sequence 1384

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>Sequence 1385

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>Sequence 1386

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>Sequence 1387

AGGTACAAAGAAAGCAGAACTGGCAATTTATTTGTGACTGCAACAGCCCG TGCGTGTTCAGGAGTGTGTCTTCCAATCTGTCCTAAGGCCCAAGCAGCTG CAGCCTTAATATGATCTTCCGGTTCTTCTGACAAGCATACTGACAACTGG GGTACCTGCCCG

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>Sequence 1389

>Sequence 1390

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>Sequence 1391

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>Sequence 1392

>Sequence 1393

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>Sequence 1395

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# Table 3

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>Sequence 1396

>Sequence 1397

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>Sequence 1398

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>Sequence 1399

>Sequence 1400

>Sequence 1401

>Sequence 1402

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>Sequence 1403

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# Table 3

>Sequence 1404

>Sequence 1405

>Sequence 1406

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>Sequence 1407

CCGGGCAGGTACTTTGGCCTCTCTGGGATAGAAGTTATTCAGCAGGCACA CAACAGAGGCAGTTCCAGATTTCAACTGCTCATCAGATGGCGGGAAGATG AAGACAGATGGTGCAGCCACAGTTCGTTTGATCTCCACCTTGGTCCCTCC GCCGAAAGTGAGCGGGGTACCT

>Sequence 1408

CCGGGCAGGTACTTTGGCCTCTCTGGGATAGAAGTTATTCAGCAGGCACA CAACAGAGGCAGTTCCAGATTTCAACTGCTCATCAGATGGCGGGAAGATG AAGACAGATGGTGCAGCCACAGTTCGTTTGATATCCACTTTGGTCCCAGA GCCGAAAGTGAATATAGGATGAGGCCAGTTGCTACGCTGCT

>Sequence 1409

CCGGGCAGGTACTTCCAGGAAGTGAAGTAAAACCTGGTCTTGGTTGATAG GCCCCAGGTTGGCTTGGAGCCATTCCAGGTTGAGAGGCAGGAGCCACAGT ATAATTAGTAGGCTGAGAAGTTTGGGCAGTGTAAGTTTGTGCAGGATAAT TGCTCGCCTGGTACCT

>Sequence 1410

CACGCTGGTTTTGCATCTTCAGGAGACGCTCGTAGCCCTCGCGCTTCTCC
TCGGCCAGTTCGCGGAAGAAGTGGCTCACGCC

>Sequence 1411

>Sequence 1412

>Sequence 1413

CGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCA GTTGAAATCTGGAACTGCCTCTGTTGTGTGCCTGCTGAATAACTTCTATC

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>Sequence 1414

>Sequence 1415

>Sequence 1416

>Sequence 1418

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>Sequence 1419

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### Table 3

>Sequence 1420

>Sequence 1421

>Sequence 1422

>Sequence 1423

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# Table 3

>Sequence i426

>Sequence 1427

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TCGGCCAGTTCGCGGAAGAAGTGGCTCACGCC

>Sequence 1428

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# Table 3

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>Sequence 1429

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>Sequence 1430

>Sequence 1431

>Sequence 1432

>Sequence 1433

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>Sequence 1434

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AGGAATGAAGAGAAAGCAGCTCCCTAACTTCAAAACCATTTTGGTACC
TGCCCG

>Sequence 1435

>Sequence 1436

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CCCGAGGCCTGCGGGCCACCTACCACCGGCTCCTCGATAAAGTGGAGCTG
ATGCTGCCCGAGAAATTGAGGCCGTTGTACCGTATATAAAAGACAATTGC
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>Sequence 1437

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# Table 3

>Sequence 1438 CCGGGCAGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTA TGGTGCATCCACCAGGGCCACTGGTA >Sequence 1439 AGGTACCTAGAATATCAACAGAGTCTTTTAAATGAAATTGATGGAAAATC AAGATGGTTCTACTCACCGTGGTTGTTGGTAGAATGTTACATGTATCGAA GAATTCATGAAGCAATTATCCAGAGTCCACCAATCGATTACT AGGTACACAAACTGTTCAATCTTCTCAAAGTGATGGACTCGGAAGATGCC ACGGGTGTCACGGCCATGGAGCCCACCTCCTGACGGAAGCAGGTAGACAG GCCAGCATACTTGATGGGCAGGTCCTCC >Sequence 1441 CCGGGCAGGTACGCGGGGATCCAGAATACATTTCCAACAAGAGCACTGGC CAAGTCAGCTTCTTCTGGAGAGTCTCTAGAAGACATGATGCTACACTCAG CTTTGGGTCTCTGCCTCTTACTCGTCACAGTTTCTTCCAACCTTGCCATT GCAATAAAAAAGGAAAAGAGGCCTCCTCAGACACTCTCAAGAGGATGGGG AGATGACATCACTTGGGTACCT >Sequence 1442 AGGTACTTTTGTTTGTTTTTTTTTTTTTCACCTTAAGGGAGGATTTA ATTTGCTCCCAACTGATTGCACTTAAATGAAAATTTAAAAATGAATAAAA AGACATACTTCTCAGCTGCAAATATTATGGAAATTGGGGCACCCACAGGA ATGAAGAGAAAGCAGCTCCCTAACTTCAAAACCATTTTGGTACCTGCC CG >Sequence 1443 AGGTACTTTTTTTTTTTTTTTTTTTTTTTCACCTTAAGGGAGGATTT AATTTGCTCCCAACTGATTGCACTTAAATGAAAATTTAAAAATGAATAAA AAGACATACTTCTCAGCTGCAAATATTATGGGAATTGGGGCACCCACAGG AATGAAGAGAAAGCAGCTCCCTAACTTCAAAACCATTTTGGTACCTGC >Sequence 1444 AGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGC ATCCACCAGGGCCACTGGA >Sequence 1445 CTCCCTACCTCTACATACATATTTCATCTAATTCTTCTATCAATTC TATTATATGTTATATATACTCTTTATTATTAACTATATTATACAACCTAT ACTATATTTAAACTATCTTTATCTTTATCGTTATCGTGTTATCACG >Sequence 1446 CCGGGCAGGTACACAGTAAACGCATTCCTCACTTCGCTGAACAGCAGAGG CAATCCGTTTCTAAGTTCCTAGCCACTCTTCATAGAGTCTCTCCATCCTT GTGCTGACAAGCTAAGGAATTTTCTCCAGCCGCAACTTTACTTTCCCCCA

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GGG

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>Sequence 1448

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#### Table 3

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>Sequence 1449

>Sequence 1450

>Sequence 1451

>Sequence 1452

>Sequence 1453

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>Sequence 1455

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>Sequence 1456

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TATCTTTCCCCGCCATTCTGATGGAGCAGTTTGAAAATCTGGGAACTGGC
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CACCCCCGGGTCTTGTCAAGGGAAATTTCGAATTATTCAAGGCCTTAATT
CGAATTACCCGTTCGTACACTCATAGGGGGGGGTGCCCTCGGTGTTACT
CCAAGTCTTTATGTGTTTTCACCTTTTTAGATGAAGGGGTTTAAAATTAG
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>Sequence 1457

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ACCTGTCCTTCTCCATACGCATCTCTGAGAGCCCAGTGTCAATCCAGCTA
GGTGCCCCCAAGGAAGGGAGGTGGGCCAAAGGTAAAAAGGGGCTCAGGGG
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>Sequence 1458

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>Sequence 1459

>Sequence 1460

>Sequence 1461

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TTAAGTAAAACAAATCAATTGTATATATAATTGACCTTTTTGTGGAACAT
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TGATTGAACAGTTGTGCTACAATCAACTTTTCATAGTACCT

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>Sequence 1463

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CAAAATTCTTTTTCCTAGAAGAAAACAGTCACCAAGAATCCATGGGTTCT
ATAAAAAAGGGTACCATTGTAAGCATTTTGGTGCAAGACAAATACCCGGG
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ATTA

>Sequence 1464

>Sequence 1465

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>Sequence 1466

>Sequence 1467

>Sequence 1468

>Sequence 1469

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CCTCCACCTCTACCTAACAAAGTCCCCCGCGTACCTGCCCG

>Sequence 1470

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# Table 3

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>Sequence 1474

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>Sequence 1475

AGGTACCGCTTCCCTGAAGAGCTCACCCAGACCTTCATGAGTTGTAACCT CATCAGTGGAATGTTCCAGCGAATGGACAAACTGAGAAAAGATTGCCTTT GCTAGTGTTATCCTGTTTAGAAACAACAACAGCAGCTCCATTTCTGGGGT TTGGGTCTTCCGAGGCCAAGATCTTGCCTTTCTGCTGAGTCCAGATTGGC AGGTGGACTATGAGTCATATACATGTCGGAAACTGGATCCTGGTAGCGAG GAGACCTAGACCCTCGTTCGAGACCTGCCCGG

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CAACATGAATCTGCATTTCTTGGATGAGATAGTTAATAACAAACTATTTC
TCAATATTTGTATACTAAAAACTAGTAAAGGTGTTATGTGTTTCAGTATC
TTATCTCTTATTTGAACATGGGTTTCTGAAAGGAGCCTATATAATAATA
AAATGGTATGTAGTAAATGAGGCACTGCCTTGGCTGGGACTGCTATAAAA
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GAGGG

>Sequence 1477

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>Sequence 1478

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# Table 3

CTTAAGCCTGTATTGGGGCAAGGCGTATGGCCTCATAGACTCAGGTAAAG GGCTGCTCTTCCCTTCAGGGCCTTCCCCAATAACCCAAATCATAGGGGCA ATAACCGCGGGCTTCAGCCCAACACCTTTTGGCACTTCATTATTTCCCCG TTATGGCTTTTCCGTCTTTAAATTGTTACCCTTGCCCCGGGGGCTGGTCC GTCTTCTAGTAAACCTAGGTTGGAATTCCCCCCCGGGGCCTGTCAATGGA ATTTTCGAATTATC

>Sequence 1479

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AGCTCAGGACGGTGTTGGTCAAGTGACACTTATAATCCTGTACCNTGCCC
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GGGGGACGACATCTTCTCATCAACTTTGGTGGCGGACCCGGGTGGTATCG
GACGAAGGAGGCAAAACCACATCTCGGTCAATTCTATTCCAGCAATCCAC
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>Sequence 1481

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>Sequence 1484

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GCAATAGATCTCACCATCCTTGTCTGCCAGGGTGGTCGACTCGAGGCCTT
TGCCACATTTGGCACATCGGAAGCAGGACTTATGCCAGGACTTCCCGGCA
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CTCAGAGCCGCCGATCTTCTGAGCAAACTTGGATGCATTGGGGTTGGTGG
TAGCCGACGCGTGGGTCGA

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>Sequence 1486

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#### Table 3

 $\label{thm:continuous} \textbf{GTCTGTCTGTATGTGAGTCTGTGTGCCACATTTTTGTTGTGTCCAT} \\ \textbf{AGGGGTCAAAAGAGCTTCAATTTGTGTGCCATTTTCAGTTTTCGGAATTG} \\ \textbf{AACTGGTGATAAGTTTTTTCTG} \\$ 

>Sequence 1487

>Sequence 1488

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>Sequence 1489

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CACTGCCACTGAACCTGGCTGGGATACCAGTGGCCTGGTGGATGCACCA
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>Sequence 1492

>Sequence 1493

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>Sequence 1495

>Sequence 1494

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G

>Sequence 1496

AGGTACCAACTGGCCTCATCCTATATTCACTTTCGGCCCTGGGACCAAAG TGGATATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCA TCTGATGAGCAGTTGAAATCTGGAACTGCCTCTGTTGTGTGCCTGCTGAA TAACTTCTATCCCAGAGAGGCCAAAGTACCTGCCCG

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>Sequence 1500

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ATTCATGAGGCAACTCATGACAGAACACCAGCAACAGAAGTACCTGCCCGG
GCGGCCCCGGGCAGGTACAAGGGATTGATTTAAACCAAATTCGAGGAC
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GCTGGACCATCGA

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>Sequence 1506

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>Sequence 1507

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GCTAATUACCTGGGAGCTAGACCGGCTGCTCTGGGCTCAGTGGAGA
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>Sequence 1508

>Sequence 1509

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>Sequence 1510

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# Table 3

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>Sequence 1516

>Sequence 1517

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>Sequence 1519

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>Sequence 1520

>Sequence 1521

>Sequence 1522

**TCGACGCTACTCT** 

>Sequence 1523

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>Sequence 1524

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# Table 3

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>Sequence 1529

>Sequence 1530

ACATCGCCGCGAGGGATCGTTGGCAGCCGGGTGGGAGCGTGGCTGTTTCTCGTCCCTGGC

>Sequence 1531

>Sequence 1532

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Page 503 of 685 of Table 3

ATGACACTAGGAAGTAAAGCCCTTGGGAGATAATTAGGTTTAGATGAGGA CATGAGGATGGGATCCTCATGGTGAAATTAGT

>Sequence 1533

AGAATTGTTCTTGACTCCTTTTCTTGACATTCAGTTTTCAGAATTTCCAT CTTTTTCTGGAACTAATGTGCTGTTCTC

>Sequence 1534

TGGCACTCATTTACCCGGAGGCAGGGAGAGGCTCTTCTGCGTGTAGTGGT TGTGCAGAGCCTCATGCATCACGGAGCATGAGAAGACGTTCCCCTGCTGC CACCTGCTCTTGTCCACGGTGAGCTTGCTGTATAGGAAGAAGGAGCCCGT CCGAATTCCAAACACCGGGAGGGCGTGGGACTTGGTAGTTGATTCTCCGG CTTGCCCATTGGCTCTTCCCACCTCCACCGGCCGATGGTCTCTTGGGAAT AAGAAGCCCCTTTGGACCACGGCAAGGTTCAGGGGCTTGACACTGGTATA CTTGGTGCAGCCTTCATCCCCCGGGGATGTGGGTGGCAGTGGTTGTTACT CTACGGTCCGCGCTCTTAAGAACCTAGTTGGGAATTCCCCCCCGGGACTT GCAGTGAAATTTCAGATATTCAAAGGCTTTATTCGGATACCCGGTGCGAA CCTTTTAAAGGAGGGGGGGCGCCCGGTTACCCCCAAACTTTTTTGTTTCC CCTTTTAAATGAAGGGGTTTAAATTTGCCGCCCGCTT

AGGTACTGGGGTTGGGGAGAACCCGTTTTGATTACAAGCAGATAATTATC GGAAGTTAGAACAACCCAATGCTTATTTGATGGGCTGAATAAACTATTCA NGACTGAACTATTTTTGAGCACTGTGAGGTGGCACAGTAATTACCTGCTT CAAAATCAACTGATACCAACATTTTTATCTTTGTATCTTATCTCTGTACC **TGCCCG** 

>Sequence 1536

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AGGGGAGCTGCACCGCGGCGGCGGCCGAAGCTTTATAATCTTTTAACTAA ATGTAATTGTCACCATAATCTTATAGACAAAGCATTGAGGTTTATTGAAC TAATGCTGAAGGTAGTAAGTGGAGGAGCCAGGATGAGGTCAGAATCTGAG ATATAACCATGCCTATGCTGTCACTTCTTACACTCTAAAATACCTCCATG CTCATGTGGACACCTAAGAACAAATGAATATTTCTATTCTTGTCCCAGAA TATCAAAACATTAAACATGTTAAACTGTATTTTTGATTACCATAAGCCTT TCCAGGAGGAACAAGCACTAAACACAGTCTCTGGCTTAGGATTTGGATGA ACATATTCAAAAGCCATCTGCTTCCCAGCAATCATAATCATACCCTTTCC TTTTGGCCACTATCACCAAGATCTCCAGTAGTACCTCAGA

>Sequence 1538

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>Sequence 1539

AGGTACGCGGGCAGGTGATGTTTGTTTTCACGATGGTCTTCAGATGCCC ACGTGGGCACTGCTGAGAAAGCCACTTGGTAAAACTGATGCCGGAAATGG GGCTTTTTGGGATCCCTGCTCAGCTGCTTCTGAGTCCCAGCATGCCCTGG TTACCTATGGCCCTCTTTCCCATGGGACCTGACCTATGATCGGCCCCCGC TCCTAGGCGTGGTGACCAAGATGAAGATGCAGAGGACCATTGTCATCCGC CGAGACTATCTGCACTACATCCGCAAGTACCTGCCCG

>Sequence 1540

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#### Table 3

CACCAGACATACATTGCTAGCCTGTGAGCAAAAAGGTGTAACAGCTCTGC
GGTTGCCTAAATGAGGTGCGCATCCCTCACACTTAATTGGCGTAGCGCCT
GCGGGGGCCTAATTGCAGGACGGTACACCCGTTTAAGCCACGCTGCATTT
ACTGATCCGCCCTTCCACGTCGGGGAGAACTCGTTCTTGGCCATACTGGAT
TCACTCATTTCGGCTTCAACCCGCCAAGTACATGGGTTGTTTTTATTT
GGGCGCTTCTTNCCGATTCTTTTTGCTTAACTGACTTCAAATGGGGCTTGG
TACGTTCTGTTTGCCCGCATACCGGCGTTTAACTTTCTTAAAAAGGCCGT
TATTCCCGATATTCCAACAAATTTGGGGTGTTACCTCAAGGATAGAACCC
TTTTGATCGCCAT

>Sequence 1541

TTAACTGGACAGGTCAATTATCTGAGCTGTGTAAATCATTGTCTGGCACT ACAGTTGAATCACCTTGACACTGAGCTCAGGAGCAGCCCATTTAAGAAGC ATCTTGTAAATAACAAAGTGACACCTTCGAGATTACAGTTGCAGCTATGC AAGTCATTCACAGAGTAGCTGAGGGCTCTCTTCTGAAGGAGGACCCATTA CATGAAGGTAGACCTTTCATGTCTTGTTGCCGACGTCCAAGTCTCTTGCG GTCCAGAAATGCCAGGATGGTTGTTTCAAATGCATTGGGTATGAACTGCA CCTTGAATCTGCCCTTTCCCTTTTTCGATTAAACCTTTTTCACATAGCTGCT GCTGCTCCTT

>Sequence 1542

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>Sequence 1543

AGGTACAGAAGGCCATGCTGTTATTACTCTTACACAAGGAGGCAGCCCT
CGAGCCACAGGGTCCAGCTGTTGGCTATAATAGCCTACCGGTCTCTGATG
ATCACCATGTTTCTGGAATTCAAGCCAGGAAGAAGCAGCAATCTGTCTTC
TGGATTAAAACTGAAGATCAACCTACTTTCAACTTACTAAGAAAGGGGAT
CATGGACATTGAAGCATATCTTGAAAGAATTGGCTATAAGAAGTCTAGGA
ACAAATTGGACTTGGAAACATTAACTGACATTCTTCAACACCAGATCCGA
GCTGTTCCCTTTGAGAACCTTAACATCCATTGTGGGGATGCCATGGACTT
AGGCTTAGAGGCCATTTTTGATCAAGTTGTGAGAAGAAATCGGGGTGGAT
GGTGTCTCCAGGTCAATCATCTTCGGTACCTGCCCGGGCGGACGTTCTAA
>Sequence 1544

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TCGGCCAATTCGCGGAAGAAGTGGCTCACGCCTTCCAGAGCCACATCATC
GCGGTCGAAATAGAAGCCCAGAGAGAGGGTAGGTGTAGGAGGCCTGCAGGT
ACCAGCTGCCATCTGTCAGTTAAACTTCAGAACACACATACCATAGGGAT
GAAGATAAGAAAGGAATGATTGTGACTCTGGATCAAAAATGCTCCCAGTTC
CTGAAGGTGCATGATTTAACTGTGAATGCCAACTGAGATCCTAACATCCT
ATACAACCAAAGATGAACTAGTCTCTGAACTGGTAACTTATAAAGACCAA
TTCCACAGTACCCT

>Sequence 1545

>Sequence 1546

CCGGGCAGGTACTGCTTCTATAAGAACGTGGTCCTGTATATTATTGAGCT TTGGTTCGCCTTTGTTAATGGATTTTCTGGGCAGATTTTATTTGAACGTT

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#### Table 3

**GGTGCATCGGCCTGTACCT** 

>Sequence 1547

AGGTACACCTCATTGAGGATCTAATGGACCCCTATCTTCAGCATGGGGAA CAGGGTATAATGTTCACCACCTTGAAGGCATGTTACTACCAGATTCAGCG TGAGAAGCTTAACTAGGCTGCATAACAGCTTGAAAACTGGATTATCTACT ACAGAGTGTTATAACACCCATCTGGAGTCTTCCTGTAGTGGCAAAAAAGAA CAGTGTTGAAATTGGAAGGGACTTTGTGTTATTAAGGTTGTTAGAATGAG CCTTACCAATAATAAGAGCCCTGAGCCCAGAAAAAAAGGACTGTTTATTTT AAAGGGAGGATTTGAAAGGGAGGTAAAAAAATCAGATTAGACCAGTTCTT >Sequence 1548

>Sequence 1549

AGGTACTTTNTTTTTTTTTTTTTTTTTTTTTAATATTTTAAAGTAT TGCACTGCAGTGGCATTTGTCTTGATGGCTGAG

>Sequence 1550

>Sequence 1551

TGAAATTGGTAATCAACAGAATTCTAGTGAAAAGGCCCCTTAAGCTTCCT TGAATCTAATGCTGGCATTCCGGGTTTGCAAAGGGTGGGGGTTCCCATTC TAAGGGTTCAGTTGGCCAGGTGGAATCTTTGGGACAAGAATTTCAACTTC TCAACCATTCAAGCCAGTTCTTGCAAACCCCTTGAAAGAATTTTTGCCAA GTTTTACTAACCTGGTCATACCAGAACCTTAACCAGTTTGCCCCCGGTAC

>Sequence 1552

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AAAGACATACTTCTCAGCTGCAAATATTATGGAGAATTTGGGGCACCCACA
GGAATGAAGAGAGAAAGCAGCTCCCTAACTTCAAAACCATTTTGGTACCT
GCCCG

>Sequence 1553

TGGTGAGTGACCGCGTATACACT

>Sequence 1554

CCGGGCAGGTACATTGGTGATCGGAGTATAGTTGGAGCGCTTTGTCATGA
TTTCCAGGTTGGCTTTGTCCACAGCTATGTTGGCCAATGCACCTTGAGCC
TCAAAGCTGGCAAATCGTCCAAATTCTTCAAGCCGCCAGACCGTCTCCTT
CTTTGCCATATTCACATGGAAAATCTCATCACCCCGCGTACCT

>Sequence 1555

AGGTACGCGGGGGCTGAAAAGTGCGCCCTACGAAAGGACGGTCGACTCCGGCGGGGCCCAGGTGCCAATGGGTCATGTTTGGTTAGAAGGTGACAATCTA

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# Table 3

>Sequence 1556

AGGTACTTTTGTTTGTTTTTTTTTTTTTCACCTTAAGGGAGGATTTAATT
TGCTCCCAACTGATTGTCACTTAAATGAAAATTTAAAAATGAATAAAAAG
ACATACTTCTCAGCTGCAAATATTATGGAGAATTGGGGCACCCACAGGAA
TGAAGAGAGAAAGCAGCTCCCTAACTTCAAAACCATTTTGGTACCTGCCC
G

>Sequence 1557

>Sequence 1558

>Sequence 1560

AGGTACTTCAATGATAAAACCATTGATGAGGAACTAGAACGGGACAAGAG GGTCACTTGGATTGTGGAGTTCTTTGCCAATTGGTCTAATGACTGCCAAT CATTTGCCCCTATCTATGCTGACCTCCCTTAAATACAACTGTACCTGC CCG

>Sequence 1561

AGGTACAAAACTTTTTAAATTTTATATTATTTTGAAACTTTGCTTTGGGT
TTGTGGCACCCTGGCCACCCCATCTGGCTGTACAGCCTCTGCAGTCCGT
GGGCTGGCAGTTTGTTGATCTTTTAAGTTTCCTTCCCTACCCAGTCCCCA
TTTTCTGGTAAGGTTTCTAGGAGGTCTGTTAGGTGTACCTGCCCG
>Sequence 1563

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# Table 3

>Sequence 1564

AGGTACAACTGAGCACATAGCACCAGAATATTGGAACAGATGCTTCTCCA AAGCCAAGGGTTGCCTTACATTTAGAGTGGGAAAAGAGGAAAATGAGTTA GCAGAGGAGCAGCGGGGAGGGGGGGTAAATTACAGGACA

>Sequence 1565

TCGGTCAGGGACCCCGGATTCCCGGGTAGATGCCCAGTTAATGAGCAGCT TAGGAGACTGTCCTGGTTTCTGCTGGTACCTGCCCG

>Sequence 1566

CCGGCAGGTACGCGGGGGTTCCCAGGATGGTGATCCGTGTATATATTGC ATCTTCCTCTGGCTCTACAGCGGGAAGAGATGGATCAAGATGGTGAAATA GAAGACTCCACCAATCATCCCCTTCACACGAACACCAATTTAACAACTAT CTACATGCACACACACACACAAAAGCTTCATCACTTTAACAACTATCTACATGC ACACACACAAAACCTTTGTAAGAACTCAAAATCAGATTAAGAAGAAAACA CAAGATGTGCTTGGTTTCCTAGAAGCCAACAAAATAGGATTTGAAGAAAA AGATATTGCAGCCAATGAAGAGAAATCGGAAGTGAGAGAAAATGTAC CT

>Sequence 1567

AGGTACCGTTTTTGTTGGTTTTTTTCTCCCTCAAAGTGAAATGTTAGACT ATTGTAGGGTTTTGAGCCAAGGAGTGATATTATCTGAATTCTGTTTTAAA AGGTTCATTATGGCTTCTGTGTGGAGGCAGGGTAGCTACTTAGAAACCAA GCCATCTCAGCCTCCCGATTTGTAGAGATGTGGTCTCACTATGTTGCCCA GACTGGTCTTGAACTCCTGGCCTCATGTGATCCTCCCACCTTGGCCTCCC AAAATACTAAAATGATAGATATGAGCCGCCACACCTGGCCATAAGCTTCA GCCTTGAGCAGATACTTTCTAAACACTTTATATAGGGAAAAAAACTAAT TCTTGCGTAGCCAAGGTGTTCATTTTTGCCGAGAATAACGTACCATAGTGT TTACAATTACGTGGGTGTAATTT

>Sequence 1568

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>Sequence 1569

>Sequence 1570

AGĞTACCATCATGGCTTGAGTGCTCTGAAGCCCATCCGGACTACTTCCAA
ACACCAGCACCCAGTGGACAATGCTGGGCTTTTTTCCTGTATGACTTTTT
CGTGACTTTCTTCTCTGGCCCGTGTGCCCACAAGAAGGGGGAGCTCTCAA
TGGAAGACGTGTGGTCTCTGTCCAAGCACGAGTCTTCTGACGTGAACTGC
AGAAGACTAGAGAGACTGTGGCAAGAAGAGCTGAATGAAGTTGGGCCAGA
CGCTGCTTCCCTGCGAAGGGTTGTGTGGACCTTCTGCCGCACCAGGCTCA
TCCTGTCCATCGTGTGCCTGATGATCACCGCAGCTGGCTTCAGTGGA
CCACCTTCCTTTGGAGACTGCTCCATCAGTGCCGAGGTGTGTGGGAACAG
GCTTCACTGCACCGCATCTTACTGAGTTGCTTCACGTGAGAAAAGGGG
GCTTTGGCCCTGTGACTCAGTTCCACATTTTGGATTGCATACTGGAAAAG
AAGCCAATCTTCTTGCTAGTAAACCAGCAACCCGGCTGTATACAGTGGTG
ACCCAAGCAATGGATATAAACCTAAAAATCTGAGGGAAGGGAGAGGTGGA
ATACAAGAGTTCTTGGAATCTGAAGTCTTCTATTTTGATCAGGTTATTTCC

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#### Table 3

>Sequence 1571

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>Sequence 1572

TGCCAGTGGCCCTGTTGGATGCATCATAGATGAGGAGCCTGGGAGCCTGGCCAGGTTTCTGTTGGTACCTGCCCG

>Sequence 1573

AGGTACTCACTCTCCTAGATTAGGAGTTTAGGTTGCCCCAATACCCATGC AGAGAACTTGGAGCTGAAAGGTTCCACAGCTTCAAACC

>Sequence 1574

>Sequence 1575

AGGTACAGGAGATGTGGAACCTGGTTCCAGGCAAACCAACGCTTCCAACT CCAAAGAGTTGGGGGTTGTTAGAGAGCCCTTTCCCAGAAAGCCCGACACT CATGTCTTTAGTCTGGCAGCTGCACTAGTCACTTTCAACTGGCTGACAGG TGCCCAGTA

>Sequence 1576

>Sequence 1577

>Sequence 1578

GGTTATGGCCGCTATACACT

>Sequence 1579

>Sequence 1580

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# Table 3

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>Sequence 1581

>Sequence 1582

>Sequence 1583

TGTTGTGGACGCCGT

>Sequence 1584

CCGGGCAGGTACAGCCCAATGAGATCTGCGTCATCCAGAGAGGAATGCGG TTCAGCATAGATGTCTTTGAGGAGACCAGGGGCTACATCTTGGAGGTCTA TGGTGTCCACTTTGAGTTACCTGACCTTGGACCAATTGGGGCCAATGGCT TGGCCAATCCTCGTGATTTTTTGATACCCATTGCCTGGTATGAGGATCGC CAAGTACCTCG

>Sequence 1585

AGCGGCCGCCGGGCAGGTACCTATGATTGAAAACAGTAGTTGGTCTATG
ACTTTTGAGGAGAGGGAGAACCGAAGATTACAGGAGGCCAGCATGAGGTT
GGAACAAGAGAATGATGACCTTGCCCATGAACTAGTAACAAGCAAAATTG
CTCTACGGAATGACTTGGATCAGGCAGAAGACAAGGCAGATGTGTTGAAT
AAAGAGCTCCTTTTGACCAAACAGAGGCTGGTGGAGACTGAAGAGGAGAA
GAGGAAGCAAGAGGAAGACTGCCCAGCTAAAAGAAGTCTTCAGGAAAC
AGCTAGAGAAGGCAGAATATGAAATAAAGAAGACTACAGCTATCATTGCT
GAGTATAAACAGATCTGTTCGCAGTTGAGTACCT

>Sequence 1586

>Sequence 1587

AGGTACTTTTTTTGTTTGTTTTTTTTTTCACCTTAAGGGAGGATTTAATT TGCTCCCAACTGATTGTCACTTAAATGAAAATTTAAAAATGAATAAAAAG ACATACTTCTCAGCTGCAAGTATTATGGAGAA

>Sequence 1588

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## Table 3

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>Sequence 1589

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>Sequence 1590

>Sequence 1591

CCGGGCAGGTACACTTTTGGTCAGGGGACCAAGCTGGAGATCAAACGAAC TGTGGCTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTGA AATCTGGAACTGCCTCTGTTGTGTGCCTGCTGAATAACTTCTATCCCAGA GAGGCCAAAGTACCT

>Sequence 1592

CCGGGCAGGTACTACAATGAGACAGTTGGATCCATTTTTCCAGGGTTAAG CCTGCAATACCTGAAGCTCCAGACCTGAAACCCAGAGCTCCTGCCAGCTG CTATGCCTGTGAACCTGGAAGACCTGAAGTACCT

>Sequence 1594

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>Sequence 1595

>Sequence 1596

ACGTACGCGGGGGGGGGGGGATAGCTGTCCAAGGTCTCCCCCAACACT GAGGAGCTCGCCTGTCCTCTTGCGCACGGGAAGCAGCACCAAGTTCA CGGCCAATGCCTTGGCACTAGGGTTCCAAAATGGCTACAACAGTTCCCTG AAGGTTTGCCGCCAATAGGCCTGAAAATCCAAGTTACCTTGCCTCGGGAC GGACCTGCTCTAATAACTTAGTGTGATTCCCCCTCGGGCATGTCAGAGAA

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>Sequence 1597

AGGTACAGTGTAGAAAGCAGTGGGAACTGTGATTGGATTTGGCAACATGT CAGCTTTATAGTTGCCGATTAGTGATATGGGTCTGATTTCGATCTCTTCC TGATGTAAACCATGCTCACCCATATCCCACTATACAAATGCAAATGGTTG CCTGGTTCCATTTATGCAAGGGAGCCAGTACCTGCCCG

>Sequence 1600

TACCAGTGGCCCTGGTGGATGCACCATAGATGAGGAGCCTGGGAGCCTGGCCAGGTTTCTGCTGGTACCTGCCCG

>Sequence 1601

AGGTACGCGGGAGATGAAGGTGCGCATCCTCTCCGAGCGTAAGAAGCCTC
TGGACATTGACTACATGGGGGAGGAACAGCTCCGGGAGAAAGCCCAGGAG
CTGTCGGACTGGATCCACCCCCTGGAGTCTGAAAAGTTCGACCTGATGGC
GAAAGCTGAAACAGGCAGAAATATTGAGATCAACCTGGCCTGTACCTTGC
CCCGGCCGGCCCTCTTCTTAAAAAACTAATGGATTCCCCCCCGGCCTGTCA
CGAAATTTCCCATTATCAACGCTTATTACAATTACCCCTTCTACCCTTCC
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AGGGGTTTAAATTTCGCCCGCCTTTGGCCTTAAATCACTGGGTCCTTTAC
TTGGTTTCCCTGGTGCTCAAAAATTTGTTTAATCCCGCTTTCAACAATTT
TCCCCACTCAACATAACCTAAACCCCCGGAAGCCATTAAAAGGTGGTTAA
AGCCCCGCG

>Sequence 1602

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## Table 3

 ${\tt AGCAGGTGAAATCTGGAACTGCCTTTGTTGTGTGCCTGCTGAATAACTTC}\\ {\tt TATCCCAGAGAGGCCAAAGTACCT}\\$ 

>Sequence 1604

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AGGTACAAGATGGACCCGCTACGGAACGAGGAGGAGGTTCGAGTGAAGAT CAAAGACTTGAATGAACACATTGTTTGCTGCCTATGCGCCGGCTACTTCG TGGATGCCACCACCATCACAGAGTGTCTTCATACTTTCTGCAAGAGTTGT ATTGTGAAGTACCTGCCCG

>Sequence 1606

AGGTACTGACTATAGTTAGTTATTTCTCACCAGTCACATACTCAAGAATT CTTTTACTCAGACCCATGACTTGACCACAGTGATAGCAGAAGCTGGGGTG GGCACAAATGCTTATACACAATATTACAAAAAGACGACATTCACTGGCTTA GAGAAACTGATGAATTTTCATTACTT

>Sequence 1607

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GAGAGTCTGGGAACCTTCACCGCTGACCTGTGTGAGATGTTCCCAGCAGG
CATTTATGACACCAAATATGCTGCTGAGTTTCATGCCCGTTTCGTGGCCT
CCTACTTAGAATATGCCTTCCGGAAATGTGAACGGGAAAATGGGAAGCAG
CGGCAGCTGGCAGCCCACGCCTTACCCTGGAGTTCTGCAACTATCCTTC
CAGCATGAGGGACCATATTGATTACCGCTGCTGCCTCCAGCAACCC
ACCGTCCTCATCCCACCACGACTCTGTGACAACTTCTCGGCTTATGCTGG
TGCCCCCTGGGACCACAGTGTCCTCAGTCTCACGATATTGACCTTATCAT
TGACACTGATGAGGCTGCGGCAGAGGACAAGCGGCGACGGC
>Sequence 1608

>Sequence 1610

TGGTCTAGTGGGCGCCGTATACACT

>Sequence 1611

TAACCTCGGCCCGCATCTATAAAACTAGTGTGATCCCCCCGAGGCTGACA
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AGGGGAGGGCCCCGGTTAACCCAAGACTTATTGATTTCCCTATTAGTTG
AAGGGATTAAATTTGGCGCCCGCCTTGAGCGTAAATCAAATGGGTTCAATA
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TCCCACTACAAACAATAACTTAATCCCGGGAG

>Sequence 1612

CTTCTACTTGTTCCCAACCCCTGACCGCTTATACCCGGAAAACCCCTGGT CCCAAACCTTTCCTCCCTTACAGGGAAAGCCGTAGGCCGCCTTTTCTTAA

> Page 513 of 685 of Table 3

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>Sequence 1613

CTGGCCGCCTTAACCGGATAACACTGTCCCGACCTTTTCTTCCCTTTCTG
GGAAAGCGTTGGACGCCTTTTCTCATTAGACTCCACGCCTGTAAGGGTAT
TCTTCAGTTTTCGGGTGTTAGAGTTCGTTTCCGCATTCCAAGACTTTGGG
CCTTGTTGTTGCAACCGGAAAACCCCCCTCTGTTTCAGTCTCCGAACACGC
CTGCCGTCCTTTTATTCACGGGTAAACCTATTCCGTTCTTTGAAGTTCTC
AAACCCCCGGTTATAGGACAACCGAACTTTATTCGGCCAACTTGTGCCAG
TCAAGCCCAACTGGTTAAA

>Sequence 1614

CCGGGCAGGTACTGGGCTCTGACCACTATTGGTTTTGAGACCACGATGTT GGGAGGGTATGTTTACAGCACTCCAGCCAAAAAATACAGCACTGGCATGA TTCACCTTCTCCTGCAGGTGACCATTGATGGCAGGAACTACATTGTCGAT GCTGGGTTTGGACGCTCATACCAGATGTGGCAGACCTCTGGAGTTAATTT CTGGGAAGGATCAGCCTCAGGTGCCTTGTGGTCCTCCGTTTGACGGAAGG AGAATGGATTTCTGGTATTCTAGAACCAAATTCATAAGGGGAACAGGTAC CCTAGGGCCGCTTCTAAAAACCTAGTGGAATCCCCCCGGGCCTGCAAGGA AATTCCGAATATCAAAGCTTTATTCGATTACCCGTCGAACCTTCAAAGGG GGGGCCCCGGTAAACCCAGACTTTTTGTTTACCCTTTAAATGAAGGGGT TAAAATTGCGCCCCTTTGGCCGTAAT

>Sequence 1615

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>Sequence 1616

>Sequence 1617

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>Sequence 1618

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>Sequence 1619

>Sequence 1620

TACCAGTGGCCCTGGTGGATGCACCATAGATGAGGAGCCTGGAACCTGGCCAGGTTTCTGCTGGTACCTGCCCG

>Sequence 1621

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#### Table 3

CCAGGATATTTTAATTTTCATCTTCATAACTGCCTCAGGAGACTGAAGGG CAGGTTTCATCATİTAAAGATGTAGGAACTGAGGCTTACGGACATTTGAT GACTTGCCCAAAGTCAAACAGTTTTTGTTTGTCAAAATAGATATTCAGGG GGGCCTTTTAATTTCAAATATGGGTGTCCACTCCCTGAAGCTGACCTCAT TTGTCAAAATAATGACCCGCGTACCTGTCCGGGCGGGCGCT

>Sequence 1622

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GTGCTAATACATTTCATAGGATTTCTAGATGCTGGGCTATAACATCCAGG
TTGCAATTTGGTGACGGATTTTTTTATTTCTATTGCAAATGGACTACACT
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TAAAACAAAAATAGCAGCCTT

>Sequence 1623

>Sequence 1624

AGGTACTGCTTGTGATCCAGCTACTGAGGTCTGAACCGAACAGACCTGGG
AAGTGTCTCAGAGCTGTCTCTCAGGCTCTGAGAGAAAGTAGCCAACATTA
CAGTAGACAGAGAGAGACATAGATCAAGACAGAGACAGAGACAGCATAAG
GCAAAATTACTTTATGAAATTGCCAAGTCCTTAAGCAAATCTATTTAACT
TCTTTCAGCTAACTGTATGAACCAGGCTTTTAACCTTCAAGGTTTAAAAT
TAAAAAAATAAAAAGTTACCTGCTCCGGGTCGGCTCGCTTCTAAGAACTA
AGTGGAATCCTCCGGGACTTGCAGGAATTTTGATATCAAAGGCTTTAAT
CGATACCCGGACCGCTCCGAGGGGGGCCCCGGTTACCCCAGCCTTT
TGGGTTCCCCTTTTAGTTGAGGGGTTTAAAATTGCCGCGCCCTTTTGGCCGT
AATACAATTGGTACAAAATAAGCTTGTTTAACTGTTGTGGAAAAAATTGTTT
ATCCACGGTTCACAAAATTTTTCACACCAAC

>Sequence 1625

AGGTACCAACATGTCCCGTGGTTCCAGCGCCGGTTTTTGACCGCCACATTA CCATTTTTTCACCCGAGGGTCGGCTCTACCAAGTAGAATATGCTTTTAAG GCTATTAACCATGGTGGCCTTACATCACTGAGCTGTCACAGGGAAAGACT GTGCAATGGTTGTCACCCTTATTAAAGTACCTGCCCGGACGGCACGATCT ATAACAGCTCAATTCGGCGCACTTCACTGCCATGTTCCGCCGGAAGGCCT TCCTCCACTGGTACCTGCCCGGGCGGCCGCTCG

>Sequence 1626

>Sequence 1627

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## Table 3

TTTACTTCCTTAAAG

>Sequence 1628

AGGTACAGCCTTGTTTAAACTGTTCACTGTGATCTGTGGGTCTTTGAGTT TCAGTGAGTTTGCTGAAATGTCGAAGAAGTAGTTCCAAACTTCAATGTTC AATGAAATTTTTGTTCAAGTTTGAAATGGAGAGAGCAGCTTTAAAAGGTA CCTGCCCG

>Sequence 1629

>Sequence 1630

Sequence 1631

>Sequence 1632

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# Table 3

TCTTCCCCCTTTCTTCAAAAGTAAATTTTTGCAGGGTTTTGGAACTTACC
AAAATGGAGAATTATTAGGCAAACCCCCAATGGAAAAAACCAGTTTGAAA
AGCCAAGGAACAGGTTTTCTTTTTGGCATTCTTGCTTTTAATGCTTGCCCG
GCCCTGGTAATTTTCTTGGCCCCATGGTTTGGGCCTTAAGGGCCCAAAAC
AAGTTGTCAAGGCATTTCCATTTGGAATCGGGTTTGAAAGGAAACT
>Sequence 1633

>Sequence 1634

>Sequence 1635

>Sequence 1636

> Page 517 of 685 of Table 3

## Table 3

GACATATGAAAAGTACTACAAAAAAAAAACCAAACTCCATTACACCAGTTT
TGCTTTTTTTGGTAACAAAAGTAGGTTGAAACAAATTTACAAGTTTTTTT
AATTTCCACCCGGAAAAAAAAATATACGAAATGTTTGAAAAAGCAGAGGAA
TTCGTGGCAATTTTCTTTTTG

>Sequence 1637

>Sequence 1638

TGTCATCCAGGCTGGAGTGCAGTGGCACAGTCACAACTCACTGCAGCTTC AACCACATTGGCTCAAGTGATCCTCCCACCATCAGCCTTTTTGGTAGGCG GGACTATAAGCACATGCCACCATGCCCAGTCAAGTTTTTAATTTCTTTGT AGAGACAGAGATCTCACTATGTTGCCCAAGCTGATCTCAAACTCATGAGC TCAAGTGATCCTCCCATCTTGGCCCCCAAAGTGTTGGGATTACAGGCGTG AGCCACTGCTCCTGGCCTTGCTACTCCTTTTATTATTCACAACCTCTAGA AATAGTATAGGAGATCCAAGCACTAGTCTCCCGTTGTCATGGATACAGAA AGTGGAGAAGAGCAGGATAAGTGGCTTGTTTGGGACTAGACAAGGCTG TCACTAAATGACTCACTACTTCAGCCCTTTGCTCCTCTTGGCACCTGGAC CAGCAAAGGCACACATATTCTGTAATTGTTTTGTTCCTGCCAAACCTGTT ACAAGGAATAAACTTAAAGCACCCAGAAGTTTAGCAACATATTATCATCT TGGAATGTGACATTATTAAACCCTCCTAATCCCCATGTCTACAAAATTAA GAAATCCAGAGCATGTTTTCTAAATGGAAATGGAAGCGTATACAGGCTTA ATTCACAAGAGGTAATTTTTAAGCCCTTAAAATTAGAGAATGGCAATGAC CCCTGTTAAAAAGAATACCATTT

>Sequence 1639

>Sequence 1640

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## Table 3

CAACTTAGCCTGGTACCTGCCCG

>Sequence 1641

CACTCAAATATTCAACTAGAGTATGAATCGAATAAAAATATCGAATACTCA CATTAACTGATTCAATATAATTATGCTAATAAGATATTATCGATTCTATT AATTTTCCTTCTTATCAAGTTGAGGACCGCTAA

>Sequence 1642

>Sequence 1643

AGGTACGCGGGGTCTTCATCTTCCCGCCATCTGATGAGCAGTTGAAATCT GGAACTGCCTCTGTTGTGTGCCTGTTGAATAACTTCTATCCCAGAGAGGC CAAAGTACCTGCCCG

>Sequence 1644

AGGTACGGAAAACTCTCCTCATCTGGACTCGTGACGTCCTTGCAGCCCGA GTTGGCCATATCCCACTACGCCCCTGCACTGGAGCCTGAAGCAGAGTGTA AGGAACGGCCAGAGAGCGCAACACTGGGGCCCACTACCCCGGCGCAGTGA CCGCCGCGCCCCCGCGTACCTGCCCG

>Sequence 2455

AGGTACGCGGGGACACCCTAGATCCCAAGATCTCCAAGGATTTGGTGGC
ATACCCACTCCAGCACACAGAAGCATGAGGTTCATGACTCTCCTCTTACT
GACAGCTCTTGCAGGAGCCCTGGTCTGTGCCTATGATCCAAAGGCCGGCT
TTGCCCCAGGATCGGGGAACCCCTTGCCATGAAGCATCAGCAGCTCAAAA
GGGAAAATGCAAGGTGAAGACTCACATGTTTTACCCGGAACGGGCCACCC
AAAGCCCAAGGGAAGCAAGAAGATCCCAGCCCTTCTTGGAAAAAAAGGGC
CTAATACCGGAGCCAAAAAAAAAGGCTTGTGGGGGGGGGACCTCGGGAAAA
ACTTAGGGAAAAAAAGGATTCCGAAAAATTCTAAAAAACGCGTTGG
GGTTAAAGGGAGGCGCGCCCCTTGGACCTTTTAAAAAAACTTTCCCTTGG
AC

>Sequence 2457

>Sequence 2459

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#### Table 3

TTAAATTTTTTGGAAATTGGGGGGGGTATTTGATG

>Sequence 2460

AGGTACGCGGGAGAGCTCTTTGTGGCTTGGGTGGTCAGCAAGAATTTTT
TAAGCAGAGATACTCTTGATTGGGTTGGATAAATAAAAGAGCAAGGAGGA
CATTGTAGGAGGGGAATTGCTCCCAGCAGAGCCTAGAAGCAGAGAGATTT
TCCAGGGTTCCCAGGAGAAGAGATTGAATAAGTGCAGTGGGCCATGTGGT
GACACATCTTGAGTGTCCAGCTGGAGAACTGGAAGTGCATATCATAACAG
GGGTGGAAAACTCAGAGGTTGATAGGGAATGGTGAGGTTGCAATGAGGGG
ACCGGTGGGACTTTGACCAGTGGAGCAAGAATCTTTCCCGATGAAGGGA
GCAACTGCCTTACAGCTTTGGGCAACTGTGG

TAAATTGTCGCGTCTTTGGCGTTAATTCATTGGTTCCATTAGCTTGTTTT
ACCTGGTGATGAAAAATTTGTTTATTCCGCTTCAACCAATTCTCATCACA
AACTATTACTGAGTCCTGGGTAGCTATTATAAGTTTGTTAAAGTCCCTGG
TGGTTGTCCTTTAATGGAGTTTGAGGCTTAAACCTCTACTATTTTAAAAT
GGCCGTTTGATGCCTTCACATGGCCTCGGCTTTTCTCAGGTCCGGGGAAA
ACTCTGGTACGTGGCCG

>Sequence 2462

>Sequence 2461

GCCCGGTGGCATAGTAACGGCGATGTCTGGAAGGCGGCGCGGTGGCGCGG TGGACCCTTACATTACCCAGCGTTTTAATCCGAAAGGGAAAAGACCCCGC GTACCTT

>Sequence 2463

ACCGGCAGGTACTCTTTCCTGGATTTACCATTTATACAAAGAAAATTCT
TACCCAGCTGGAAGAGGAGGAACAAAACTTTTTACTATCAGGGCACAGGC
AAAAAATCCATTTGTGCAAGATAGACATATAAGCAAAAATGCATCTACAG
TGAGAGGGGGCGGACCCAGTTTTTTTTTCCCTGTGAAGCTACATTTAATA
ATATCACTTGAAAATTGAGAATATAAAGGCTTCCTGATTCAATGATTCAA
ACTCGTCAGAATACAAAACTTCAGGTTTTGGTATGACCTAGTATGAAGTA
AAAGGCTCAAGAAAATGCCTAAAACAATTGCCTTAACCTTTTAGTAAGGT
TATTAGGTATTCTTTAGGGAACCTTGTCTCTAAAGACCAGGAAGGCCTGG
TACCAAAGGACAACTAGAAGAAAAATTCTTATTCTTTTGGCCCTAAAAAC
CCAAAAGGCCCTAATCCAATTGGAGAAAAAAAACCATCATTTTAG
>Sequence 2464

AGTGCTCTACTTTATATTTTTANTACTCGTACAGACTATATAAGTACATT TAATTTTAATTATACGTCGTCTCAAAGTCGTCATTAGTATCTTGATTACA CTGAGTCATAACTAATATTATCAGTGATAACTCACTTTNAACGTATCTAT AATCACTTTCATATATATATATATGTAATATATGTGATTATANCGA GAGCGCTCGTAATACTACTACACTTATATGGTGTCTGAGATGTGGTAGTC TACTCACCCGACGTGTATGGGCTGGTCGCGTCTCCTGTGGTCTAGTGATA TCTCATTTATAATAATAAAATATACTATACTATAGTTTGCTTGGTGTACT AGTACATCTNATATGTATAAGTATCTTATGTGTAGTACAATTCGTCGTAT TTCATAGCGTACTANGTGTACACCATGTATATATTGTTTCTCTACTAAGC TTCGACTGTAGAGTGTANTATATATACATATATTTAACAAGCTTTGTGNT CACATCTATGAGAGGTCAGATATTTTATTTTGAACTTCTCTATCCCATCT ATCTCTTTAAAAAATTTTGGGGAATTTTTTCTTTAATTTAAGTGTTTTCT CACCCTAAAAATATGTATTCCCCTATAGTTATTGTATTTTATCCATTTGT TNATATATTTAGGTTTCTATCTACTCAGTTATTAAACTACAGTTGTAATA GTGATCAAGATTATTTTTTTTTAATTACGGGCCAATACTCTAGTCGGTT TTTAATTTAGGTTGTCTTAAAGGATTAAAAAATGCTTCAATTCATACATT TTATGTTGACTTAACCTGAACATTCATTTTGTATCAAAAACTGATTCTTT ATGGCCAACCTGGTTTTTTCAGACCCTTTCTATCAACCGTTTGGCCCTT CTGGTCCCATGGCCTTTTTTTAAGTATCCCTTCCTTTTTGGTGGACATAA ACTCATAATAGTAAAATTAATGATAGGGTATTTTTTTAGATAAACCAGGG GAAACATTGGCTTTTTTTTTCATCCCCG >Sequence 2465

GTCTGAACATATCTGTATTGTACTAATATTACATTAATTGTAACTACG

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# Table 3

>Sequence 2466

AGGTACGCGGGATTGACCCAAAACCTGGATGTCCTATCTGTGTTCCAG
TAGTGCCCTATTTTAAATGTGTCATGATATCTATTACTTTGTGTGAAAAT
TACCTGTTTGTTTTTTCAGGTTATATAATAGTATAACACTGCCAAGGAGC
GGATTATCTCATCTTCATCCTGTAATTCCAGTGTTTGTCACGTGGTTGTT
GAATAAATGAATAAAGAATGAGAAAACCAGAAGCTCTGATACATAATCAT
AATGATAATTATTTCAATGCACAACTACGGGTGGTGCTGAACTAGAATCT
ATATTTTCTGAAACTGGCTCCTCTAGGATCTACTAATGATTTAAATCTAA
AAGATGAAAGTTAAGTAAAGCATCAGAAAAAAAAAGGTAAACAAATTGCTTCT
GTGGAGATGATTGGCA

>Sequence 2467

>Sequence 2468

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# Table 3

>Sequence 2471

>Sequence 2472

>Sequence 2473

>Sequence 2474

>Sequence 2475

>Sequence 2476

GGGGTAGGATGGGAAGCCGTGGGGCAAGGGAGGTTGCAGGAAGCCCATCC TTCCCCTCCTGCGGCAGGTACCT

Page 522 of 685 of Table 3

## Table 3

>Sequence 2477

CCGGGCAGGTACCCTGCAGGTAGGCATTTAAATTGGTGCAACCGCTTTGG ATTGCTGCTTTGTAGTATCTGGTGCAACTGAAGATGAACATGCCCTGTGA CACAGCAACCGCACTTCTAGGTCAATACCCTAATTATATTCTTACTGTGG TTCACAAGAAGGTATGTAAGAGGTCATTGCCTGAGCACTGTTTAGAATAG GGGCAAACTGGAAATCCTCTAAATGTCTGTCAATGAAGGAATAGATAAAT TGTAATATGTTCATATAAAATACTGCATAAATAAGTGAAATTTATAAATG

>Sequence 2478

CCGGGCAGGTACTGCTGGTTCGGGCTGCCATAAAAAGCACCACAGACGAC ATGGCTTACACCACAGAAACTCATGTTCTCCCAATCCTGGAAGCTGAAAG TCCAAGATCAAAGTGTTGTCTGGGTTGGTTTCTTCCAAGACCTCTACTGT TGGCTTACAGATGATTGTATTCAGTTCACATGATGTTCTTCTATGAGTGC CTGTGTCGATTTTCTGTTCTTATAAAGATATCAGTCAGATTAAATGATGG TTCACCCAAATGACTTCATTTCACCTTAATTACTTCTCTAAAGGCTCTAT CTCCAAATACGGTCACATTGTGAGTTTCTCAGGGTTAGGACTTCAACATG TATATTTGAGGAAGTGGAACACAATTCAACCCATA

>Sequence 2479

>Sequence 2480

>Sequence 2481

>Sequence 2482

AGGTACGCGGGACTGTTATTCTCTCCAAAGCTTACCCAGCAATAGGAACT CCCATACCATTTGATAAAATTTTGTATAACAGGCAACAGCATTATGACCC AAGGACTGGAATCTTTACTTGTCAGATACCAGGAATATACTATTTTTCAT ACCACGTGCATGTGAAAGGGACTCATGTTTGGGTAGGCCTGTATAAGAAT GGCACCCCTGTAATGTACACCTATGATGAATACACCAAAGGCTACCTGGA TCAGGCTTCAGGGAGTGCCATCATCGATCTCACAGAAAATGACCAGGTGT GGCTCCAGCTTCCCAATGCCGAGTCAAATGGCCTATACTCCTCTGAGTAT GTCCACTCCTCT

>Sequence 2483

CCGGGCAGGTACCGTTCCTCCAGTGCCCAGAGATGCTCTCCGCACCAAGC CACAGATGTGGAGGAGGCAGGTAGGGGGTCAAAGAGGGGTGGTATCGGTT

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## Table 3

ATTCAGGACTTTTTTTTTTTTTAAATATCCTGTGCTTCTTTCAATCATT
TGAAGGTAAAACCAGGTCCTGTGAGTGGTAAACTGATTTTTGGTTCTTAT
GAAGGGATTATTCTCTGTGTAAATATTTGTTAACTTGGTGTCCTTGCAGG
GTAGACGATCAGCGAACCTTTCTGTTCCACCATGGTTGCTCCTCTCATTT
TAGACCTAATATGTTGACTATAAGTGTTTCCCTCTGGAAGTATTGACTAT
ATCTGCATCAATACTT

>Sequence 2484

AGGTACGCGGGTGGGCAGCCGGAGAACAACTACAAGACCACGCCTCCCGT GCTGGACTCCGACGGCTCCTTCTTCCTCTATAGCAAGCTCACCGTGGACA AGAGCAGGTGGCAGCAGGGGAACGTCTTCTCATGCTCCGTGATGCATGAG GCTCTGCACAACCACTACACGCAGAAGAGCCTCTCCCTGTCCCCGGGTAA ATGAGTGCGA

>Sequence 2485

GGGCCTAATCACT

>Sequence 2486

>Sequence 2487

AGGTACGCGGGGTGCGATTCGCATATTCCGCGAGATCATCAAGCCAGCA GAGAAATCCCTCCATGAAAAGTTAAAACAAGATAAGCGCTTTAGCACCTT CCTCAGCCTACTTGAAGCTGCAGACTTGAAAGAGCTCCTGACACCACCTG GAGACTGGACATTATTTGTGCCAACCAATGATGCTTTTAAGGGAATGACT AGTGAAGAAAAAGAAATTCTGATACGGGACAAAAATGCTCTTCAAAACAT CATTCTTTATCACCTGACACCAGGGAGTTTTCATTGGAAAAGGATTTGAA CCTGGTGTTACTAACATTTTAAAGACCACACAAGGAAGCAAAATCTTTCT GAAAGAAGTAAAT

>Sequence 2488

>Sequence 2489

CCGGGCAGGTACGCGGGAGCAGAAATGATTGCACTATTGATAAATTCCGA AGGAAAAATTGTCCATCTTGTCGTCTTCGGAAATGTTATGAAGCAGGGAT GACTCTGGGAGCCCGGAAGCTGAAGAAACTTGGTAATCTGAAACTACAGG AGGAAGGAGGGCTTCCAGCACCACCAGCCCCACTGAGGAGACAACCCAG AAGCTGACAGTGTCACACATTGAAGGCTATGAATGTCAGCCCATCTTTCT GAATGTCCTGGAAGCCATTGAGCCAGGTGTAGTGTGTGCTGGACACGACA ACAACCAGCCCGACTCCTTTGCAGCCTTGCTCTCTAGCCTCACTGAACTG GGAGAGAGAC

>Sequence 2490

> Page 524 of 685 of Table 3

>Sequence 2491

AGGTACTTTAATAGCTCAAACTCAGAGTCATCGTGCTCCCAATTCCAAAGAGATTCCTAAAAGAGGCAACTT

>Sequence 2492

AGGTACAAGTGGATACCCCAGAATGACCTTCTAGGTCATCCAAAAACCAG
AGCTTTTATAACTCATGGTGGAGCCAATGGCATCTATGAGGCAATCTACC
ATGGGATCCCTATGGTGGGCATTCCATTGTTTTTTGATCAACCTGATAAC
ATTGCTCACATGAAGGCCAAGGGAGCAGCTGTTAGATTGGACTTCAACAC
AATGTCGAGTACCTGCCCGGGCGCGCGCTCTAGAAAACTAGGTGGATGN
NNCCCCGGGCTGCGAGGAANNTTCGATTATCAAGGCTTATTCG
>Sequence 2493

AGGTACCCCCAGTGATGGGACATGGTCGCGCTGGCGGTCGGGGCAGGGCA GGAATCGGCACCGATCTGGCGGCGGCGGCTTGGGCGCCTGCACTGTGTGT CCCCGCGTACGCGGGAATTCAGAAATCACTACAAGCAGCATTAAGACTG AAGTTGGAATATTCTGTTGACCATAAAACCTTGATATCATTCTGTGTATA TAGAATGTAAAAGGAATATTACAGTGTTAACTGCCATATATGTAATATAC ACAAACTCAATTAGCATTGTAATGGCCAAATGCATTCCCCCATGCTTTTC TGTTTTCAAAAAAAATTGAAAAACAAATCAACTCTTATCCCCAACAGCTGC CTAATTTTAGGAGTCTGA

>Sequence 2495

AGGTACGCGGGACCAGTCTTGAGAGGTGGCCAGCCAGACTGCCTGTCCAC
ATGCGTGTCAGCACATACAGCCGCTTCCTGGAAGCCGCCTGGAATGTCTT
CACGGCAGCGTTTTGCTCACACAGCAGCTTTTGCACGCCCCAGGCAGCCC
CGACTGCTGAAATCCAACTTGAGCTGGCTGGTGGTCCCTGGATCCTAGAG
CCCTTCACTTCGGGTTACTCCCTCTTTCTTGGCCTCTANNTTTCTTAGTT
GGAAGAAANNATAAACTCACAAATGTGATGGTGCAGTTAATTTTTTCCGG
GGGAAAGTTAATAGCCCTCAGGGAATGGCCCACGCCTTTGCTGTCCAAA
GGCCTTTGTGCTCTCTGGAGACCTCTTGAAGTTCTTAAGATT
>Sequence 2496

>Sequence 2497

TTTGAGAAGCCAGCGCTCACCCACCCGGGGTCTCTGTGCATTGACCTTTG
GGTGCTGACTTGGAGAAAAGCACAAACACGACCAGTCCCATCCTGGCTCC
CGTGGGGCTTCTTCTATCTACGCATTGTATCGACTGCATTAGTTGGACTA
AGATGATGACTCAGTTAAAGGAGGAGACAAATGCTGACTGTCTAAGCAAG
AATGGCCCAAGCTGGCAAGAAAAAGCACACTGCATACATCCCGCGTACCT
>Sequence 2498

CCGGGCAGGTACTGAGTCAAGGACGTCTTTAACGTCATGGACGGCTCCTT TACCCACGCTTTCTAGATCTTCGACTGCATCTTTTCCTAGTTTTCCGAGT CCCCCCACAGCTTTTTTTGCTCCGTCTAGGCCTTTTTCCAGAAGGCTGGA

> Page 525 of 685 of Table 3

TCTCTGCTTCCTTGGCTTTGGTGCCTGTCTGGCTAACCCTGGGTCTTCAC CTGCATTTTCCTTTTGAGCTGCTGATGCTTCATGGCAAGGGGTTACCCCG ATACCTGGGGGCAGACCCGCGTACCCTA

>Sequence 2499

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>Sequence 2500

>Sequence 2501

**AGATTTGGACCCTATACACT** 

>Sequence 2502

AGGTACCACCATGTGGGACTCCAGGCACCATCTGTTCTCCCCAGGGACCT GCTGACTTGAATGCCAGCCCTTACTCCTCTGTGTTGCTTTGGGCCACCTG GGGCTGCACCCCCTGCCCTTTCTCTGCCCCATCCCTACCCTAGCCTTGCT CTCAGCCACCTTGATAGTCACTGGGCTCCCTGTGACTTCTGACCCTGACA CCCCTCCCTTGGATTCTGCCTGGGCTGGAGTCTAGGGCTGGGGCTACATT TGGCTTCTGTACCTGCCCGGGCGGCCGCTCG

>Sequence 2503

>Sequence 2504

>Sequence 2505

AGGTACTCAGAAGTGTCCTGGAATGGGGCCCATGAGATGGTTGTCTGAGA GAGAGCTTCTTGTCCTACATTCGGCGGGTATGGTCTTGGCCTATGCCTTA TGGG

>Sequence 2506

TGACACTGCAGTGAAGGGCATGCTAAGTCTAGGCACAGGTCCTGGCAGCA

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GGAAGGAGACAGACCTCTCCCAGGCACACAT

>Sequence 2507

CCGGGCAGGTACACCACCAAAGACCAATAATAAAAAAGAAGGTTCCAGGG AGGGCATGACCTCTGAAATTCCCCATGATCTTTGGGTGTTTAAATCCCAT TTTCCCTTCTGAGTCATTGGTCATCCTTGGTCTCAGTAGATCAGGCACGT TAGAACTGTGGCAGAAGAGATAAGAATGAAGCAGCCAAAATTGAGCCTTT GCTTCTTAGGTAATGCTGAAAAGTTTCACACTTTTACCTCTGCCTGAGTC CCCCGCGAATCATGCGTACCT

>Sequence 2508

AGGTACGCGGGGGGAAACATGCATAAGTGCCAATCCTTTGAATGTTCCA CGGAAACACTGGTGGACAGATTCTAGTGCTGAGAAGAAACACGTTTGGTT TGGAGAGTCCATGGATGGTGGTTTTCAGTTTAGCTACGGCAATCCTGAAC TTCCTGAAGATGTCCTTGATGTGCAGCTGGCATTCCTTCGACTTCTCTCC AGCCGAGCTTCCCAGAACATCACATATCACTGCAAAAATAGCATTGCATA CATGGATCAGGCCAGTGGAAATGTAAAGAAGGCCCTGAAGCTGATGGGGT CAAATGAAGGTGAATTCAAGGCTGAAGGAAATTCACCTACACA GTTCTGGAGGATGGTTGC

>Sequence 2509

>Sequence 2510

>Sequence 2511

>Sequence 2512

>Sequence 2513

CCGGGCAGGTACCTGTCCTAGCAGTGGCAATCTTTTGGGGTCCCCTAAAA TAAAGAAAGGCTTATCTCCACACTGTAATGGTAGTGATTGTGGATATTCA TCTAGCATGGAAGGGAGTGAAACAGGTTCTCGGGAGGGTTCGGATGTTGC

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## Table 3

CTGCACTGAAGGCATTTGTAATCATGATGAACACCGTGATGACTCTTGTG
TTCATCACTGTGAAGACAAAGAGGATGATGGTGATAGTTGTGTTGAATGT
TGGGCAAATTCTGAAGAAACGACACAAAAGGAAAAAATAAAAAGAAGAA
GAAGAAAAACAAGATACTGAAATGTGATGAACATATCCAGAAGCTTGGAA
GCTGTATTACAGATCCAGGTAATCGAGAGACCTCAGGAAATACCATGCA
>Sequence 2514

>Sequence 2515

AGGTACGCGGGGATCCTTAAAGAAGGTGTGGGGTCTTTCCCAACCTGAGG ATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATGTGA GGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAAATATAT GAATACATGCGCAATACACAGCTACAGACACACATTCTGTTGACAAGGGA AAACCTTCAAAGCATGTTTCTTTCCCTCACCACAACAGAACATGCAGTAC CTGCCCG

>Sequence 2516

CCGGGCAGGTACTGGATGTCAGGTCTGCGAAACTTCTTAGATTTTGACCT CAGTCCATAAACCACACTATCACCTCGGCCATCATATGTGTCTACTGTGG GGACAACTGGAGTGAAAATTTCGGTTGCTGGCAGGTCCGTGGGAAAATCA GTGACCAGTTCATCAGATTCATCAGAATGGTGAGACTCATCAGACTGGTG AGAATCATCAATGTCATCTACATCATCAGAGTCGTTCGAGTCAATGGAGT CCTGGCCTGTCCACATGGGTCGTCATCATCTTCATCCATATCATCCA TTGTGGTCATGGCTTTTCGTTGGACTTACTTGGAAAGGGTCTTCTTGTTT AAAGTCATTTGGTTTCTTTCAGAAGGACACAGGCATTCTGTGGGGGCTAGG AAGATTCTGCT

>Sequence 2518

>Sequence 2519

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#### Table 3

GATTTTTAAACAAACCCAATTTTCTCTTGCTGTTAACAACACTGAAGACT AGTACCAGAGGAGTGAAAGTGTGGGTTAAGAGCCTTAAAAACTTGTGGAA AAGGGCTCGATGCCAGTGGAGAGCACTTATTTA

>Sequence 2520

CCGGGCAGGTACAGAAGGGCCATGCTGTTATTACTCTTACACAAGGAGGC
AGCCCTCGAGCCACAGGGTCCAGCTGTTGGCTATAATAGCCTACCGGTCT
CTGATGATCACCATGTTTCTGGAATTCAAGCCAGGAAGAAGCAGCAATCT
GTCTTCTGGATTAAAACTGAAGATCAACCTACTTTCAACTTACTAAGAAA
GGGGATCATGGACATTGAAGCATATCTTGAAAGAATTTGGCTATAAGAAGT
CTAGGAACAAATTGGACTTGGAAACATTAACTGACATTCTTCAACACCAG
ATCCGAGCTGTTCCCTTTTGAGAACCTTAACATCCATTGTGGGGATGCCAT
GGACTTAGGCTTAGAGGCCATTTTTGATCAAGTTGTGAGAAAAT
>Sequence 2521

>Sequence 2522

AGGTACCTGTGAATTGGACATCTGTTGTTTGCAGATGTAATTAAGATGGG
TCATACTTAAGTAGTGGGGCCTCTAATCCAATGTGACTGGAGTCCTACT
AAGGGAGCAGGGTCAGAGGCAGACATGGGAGAATGCCATGTGATGACGGA
GGCTGAGATTGAAGTGTTGCAACTGCAATCCAAGGAATGCCAACATTTGG,
TGGCCACCATGACAAGGTAGAAGGAGGCAAGGAAGGCTCCAACCAGTGTC
TCAGAGGAAGCATGGCCCTGGTGACATGCTGAGTTTACGCTTCCAGCCTC
CAGAGCTATAAGAAGGTAAATGGTCTGTTTTCTGGGGGTTCCCTGTTACA
GCAGCCTTAAAAAAATCATTGCAATATTTGACCTACAA

AGGTACCGCATTCCTACTTCATTGCCCCTGATGTAACTGGACTCCCAACA
ATACCCGAGAGTAGAAATCTTACAGAATATTTTGTTGCCGTGGATGTGAA
CAACATGCTGCAGCTGTATGCCAGTATGCTGCATGAAAGGCGCATCGTGA
TTATCTCGAGCAAATTAAGCACTTTAACTGCCTGTATCCATGGATCAGCT
GCTCTTCTATACCCAATGTATTGGCAACACATATACATCCCAGTGCTTCC
TCCACACCTGCTGGACTACTGCTGTGCCCCAATGCCATACCTGATTGGAA
TACACTCCAGCCTCATAGAGAGAGTGAAAAACAAATCATTGGAAGATGT
>Sequence 2524

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#### Table 3

CATTCATATTTTCCATCTTATTCCATATAAAAGTTTTGCGAATATTTGCCCAAAGTTGTCCTCTTTTAG

>Sequence 2525

CCGGGCAGGTACCAACTAACCTCCCGCTCTTTATCTCCCCAACCTTCCCA CTCCCCAGCCTCTAGTAACCATTATTCTCCTCTACCTGTGAGTTGATTTT GACCTCCCACATAAGAGAATGTGGCAGTATTTGTTTTTCTGTGCCTGGGT TATTTCATTTAACATACTGTCCTCTGGTTCCATCCTTGTTGTTGCAAACG ACAGGATTTTGTTCTTTTTTATGACTGAATAATATTCCATAGCCATATAC ATACCATGTTTTCTGTATCCATTCATTCGTTGATTGGCAGTAAGGTTGAT TCCATATCTTGGCTGTTGTGAATATTACTGCAGTAAACATAGGAATACAG ATATCTTTTCCATATACTGATTTCCTTTGTTTTGGATATATACCCAGCAG TGGGCTTGCTGGATCATATGGCAGCTCTGATTTTAGGTTTTTAAGGATGG GTTTTTTTTTTCCAATGAGAATAAAAATTTTCCATGTATAAGATCAGTGT CTTTGAACTTTTGTTATATCCTTTGCCCATTTTTCTATTGAGTTCTTTTT TCTTTTTGAGACAAGGTTTATTGCCCAAGCTAAGATGCAATGGCATGATC ACAGCTCACTGCAGCTTTGATCTCCCGGGCTCAAGTGGTCCTCCCATGTC AGCCTTCTCAATAGCTGGGACTAGAGGCACATGACATCATGCCTGGCTAA TTTCCTGGATATTTTGGGGAGATGGAGTCTTTCTATTTTGGTAAAGCCGG TCCTCAGGTCCTGGCAATAATGGGCTTTTGGCTTGACCTTCCAAAGGGAC CTCGCCGCTTTAAG

>Sequence 2526

CCGGGCAGGTACAATACTTTCTGACTGTCCACTAAAATGTCAAACTATTT CAGACTCCTACTCCCACTGTCTTAGTTGATTTTGTGCTGCTGTTATAG TTCTGGAGACTGGTCAAGGGGATGGCATCTGGTGAGAACCTTCTTGCTAC ATCATCTCATGGAAGAGGTGGAAGGGGCACATATGCCCAAGA GAGAGACGAAAAGGGGGCCAAGCTCATCCTTTTATTAGGAATCCATTCCC ATGATCTCCCATGATAACAGCATTAATCCATTATAAGTGCAGAGCCCTCA TAACCTAATCACTTTTTAAAAGTCCCACCTCTCAACACCATTGCATTGAG GATTAAGTTTCCAACACATAAACTTTGGGAAATGCATACAAACCATAGCA CTACCTCCCACTCACATCTTGGCTCTTCAATGTCAAGGTATATTGGTTGT TAAGGGAATATAAACACATGAAGACATGTCTCTCTTTCAATCCAAGACT TACTGGAATTGTGTCAAGCTTCTTGTGGTCAGAAATGAGGACTTCTCTNT AATTTGCATTCTTATGATCCCATGAGCCCCAAATACAGTGAGATGTTTAG AACCTAAACACCCTCCAGTAATGCCCACTGATTGGCCTGCTCTCAGAAAT GGTGGTTTCTTCTGAAACTTTAGCTGGGTCCAACCAGGTGGGAGATGCAA AAACCTTGCTGC

>Sequence 2527

>Sequence 2528

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#### Table 3

>Sequence 2529

>Sequence 2530

AGGTACAAAAAACACAAGGAATACAACCCAATAGAAAATAGTCCTGGGAA TGTGGTCAGAAGCAAAGGCCTGAGTGTCTTTCTCAACCGTGCAAAAGCCG TGTTCTTCCCGGGAAACCAGGAAAAGGATCCGCTACCCAAAAACCAAGAA TTTAAAGGAGTTTCTTAAATTTCGACCTTGTTTCTGAAGCTCACTTTTCA GTGCCATTGATGTGAGATGTGCTGGAGTGGCTATTAACCTTTTTTTCCTA TTCAGCCATGTTGTGAAACTGATAAAAGCAACTTAGCAAGGCTTCTTTTC ATTATTTTTATGTTTCACTTATAAAGTCTTAGGTAACTAGTAGGATAGA AACACTGTGTCCCGAGAGTAAGGAGAGAAGCTACTATTGATTAGAGCCTA ACCCAGGTTAAACTGCAGAAGAGGCGGGATACTTTCAACTTTCCATGGTA CTGTATGCATAAAGCCAATGTAGTCCCATTTCTAAAGATCATGTTCCCAG CTAACTGAACCCCACTTTAATACACACTCATGAAACTCTGGTGGAACAAT AAACTACTCTTATAAATGGGTGGGAGTATTTGGTGACAACCTACTTTGTT TGCTGAAGGAAGAAATTCAAATATTCATTATTTCAGGGCATTAGTAG **TGGTTTTATATACAGGCAGN** 

>Sequence 2531

AGGTACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTATGAAGACTTTTATTAAATT
ACAGTGTATTACAGATTATATCATAATAATAAGCCTTTCATCTTTAGGCT
AATATGATACAAAAACCTACTTGGCCACATTACTTCTTGAGTTTCTTTTG
GGCAGCTTTCTTCTTGACCATCTGTAATCGCTTCATAGCATTGAGCCGTG
ATTCTTGTGAAGTTGGGCCTTTAAGGGATGCTGAGGGAGAGCTGCTGGAT
TCTGAAGTAGTTTTGCTGGTAGAACCTGCCCG

>Sequence 2532

>Sequence 2533

AGGTACAGCTGCTATCTTATTGGACTACAGTAAATATTTTTTTAAAAGGAC ACCAATGAGGGCACCATCTGGTGTTAACCTTAACCAGAAAGCTGGTTTC CTCCTCCTCCCCCCCCGCGTACTTTGGCCTCTCTGGGATAGAAGTTATTC

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## Table 3

AGCAGGCACACAACAGAGGCAGTTCCAGATTTCAACTGCTCATCAGATGG CGGGAAGATGAAGACAGATGGTGCAGCCACAGTTCGTTTGATTTCCACCT TGGTCCCTTGGCCGAACGTCCTAGGCCAATCGTTGTACCTGCCCG >Sequence 2534

>Sequence 2535

AGGTACCACTATAATCTCTAATACTTACTCAGAATTACTGTGTATTTACT
TAATTTCTTATTATGTGCCTTATTATGTGCTTAAGATACAATAGGTTAGA
GTTTAATCTAAATATCTTGAAAGCTATATTGGGGCTTGGTAAGCATTTTG
TTTTTTCTTCTCTGTTTTGGTAAGGATTTAAAATTTTTTCATTGCAAT
TTTAAGTGGTTTTCAATAAGTAATAGTTTTTATCAAATTTTTTGGTGCTTG
GTGCAGAGACGGTGTGGGGAAGGGTGAATGGTTTTGGGAATAATTCAGTG
CACACCTGTAGGCCTCTTTACATTGTGACTGATAGGGGTTATTGCATATC
AATTTGGGGCTGTAGAGTGCAATCTCAGTTTCATCTTTTTTCACCCATCAG
AATTTGTCTCAGGATTACTTGGTTTTTCTCAGTCCTCAAGCGAGAACTTG
CTTTTCTTTGTTAATGTGACTTTCATTACTGAGTACCTGCCCGGGCGGCC
GCTCGA

>Sequence 2537

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>Sequence 2538

CCGGCAGGTACTCAGGGATAATAAAAATGCAAACAAAGTTTTATGCACAT AATACCCATCACAGGGTTACTTATAACAGCAAGAATTAGGAGACCAAAAA AAAGGTAGACAATATAAGAGGAATGGTTGGGTAAGTCATATATGGCCATA CAATGGATTTTATGAAGCCATTAATAAGGAAGATTTTAATGTAATAGAAA ATACATGAGATAAATTAAGTAAAAAAAGCGTGACACAAAATTGCACGTAA AACCTCACCCATCTTAAAAGGATGCTTAATGATACTTTTCACTTTATGCT TTCATAATATCTAAATGATCTACAATTAACCTACATTTATTCTCTAATGA TCATCCAGGCTGGAGTGCAGTGGTGCGATCTCGGCTCACTGCAAGCTCAG CCTCCCGGGTTCACGCCATTCTCCTACTTCAACCTTCCAAGTAGCTGCTT GAACCCGGGAGGCAAAGGTTGCAGTGAGCTGAGATCATGCCACTGCACTG AGAAAAAAAATAGGAGCTTTTAAACACGCAGGTGGAAACGTAAATATTAA TTACCCGATAATGGAATTACTACCAAAACCTTAAAACGTGTTTATACTTT GACTCCAAAAGTTATTTGCAGAATTTGCCCCTAGGCAAAAGAAATGATAC AAAATTCTTTAAGGGTTATTAACAGTTTTATCATGCTAAATAAGACCTCG **GCCGTCTAAAATAGTGGA** 

>Sequence 2539

>Sequence 2540

>Sequence 2541

AGGTACCCTGCTCGAAAGATTATTTCTAACAGGCTTGTAGAGAAACGTCG
GTTCATGTCAATTAGAAATTATGGGGCCACTTTGCCATTCTTCACACCTG
CAATGAACAGGTGTTTATCTGCAGGTCTGACTTATCTCTTGAACTCCATT
TGCATGTTATAGTGGGATGCAACTGATGCCCTGTCCAGATCTTCTTCAGG
CCACTACATCTATATATGCATTCATATTCCCGCGGCTGCCAGTGTTGGCT
GTTGGTTGACAGAGGAGCTGCATTCTCCTGGAGGAAACTGAACTCAGCTG
ATGAAAGCCACCTGGTCCTGGAGGTGAAGCATCTTCCAAATGACAGCCTG
CAGTCAATGACTGATGAATATGACTTCATTGCCTCATGACAGGACCTACT
CTGGGGTATAGATCATG

>Sequence 2542

TCACACTCATTTACCCGGGGACAGGGAGAGGCTCTTCTGCGTGTAGTGGT TGTGCAGAGCCTCATGCATCACGGAGCATGAGAAGCCCGCGTACCT >Sequence 2543

AGGTACAAATTAATTTAACACATCTTTTGATAATCTCATCCTTGGTGTTG GAAAAGACGGGAAAATCCAAAAGTGTCTATTTTGTGCCCAAATGCTCAAG TTAATACTCGAGGGCCTTGATCTCTGGCCTCTTGCCATCCCCAT

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#### Table 3

TATTTCTGAAGAAGTAGCCATTTTGCAGATTCCGGAGGATGGGAGCCA
>Sequence 2544

AGGTACCATATACAAAGACTCTGAGCTGGGTGCCTCCGATGGTTTCCAGT
ATTGGCCCGTTGTAAAGCTCATTAAGGCCAACTTTTACTTTCAATATGTG
ATTCTGCAGAATTAATTTAAGGAGGCGCTGATCCATGCTGAGAGTATCAT
GAGAAAAGGGCATAAATCACAAGGTGCCAGCAAAGTGTAATTTTTCATCA
TGGCCTCCAGAGCAAGATGCCTAAGCTCTAAATTGGGTCCACAAGGATAC
CGTCGAAGGATGGTATTGCTTGTTTTTTACCAGCGCAGCCTCAAATAAACT
TTTGTTTTTGGCAAGAAGTCAGGGATATATAGGACTCATGAGTCAATTCAA
GATGAGATCAACATCCATTTATATTGTTCAGCAAATATACCTCTCTTTGT
ATCACCCAATTTCTGGATTAGCAATTTAACTGGGTATAACCTGAGCAACC
GGTCACGATTCCTAATCCTTAAATTTGTATTCTCCCTGTGCA

>Sequence 2545

AGGTACGCGGGCACCTTGTGGGGCATGTTTGTATTTATTGCTTCATGGCC GACTGGAATCCTGAGTCCTGGGAAGCTGGCACTGCGGGGATCTTGCCCGG TGTCCTGGTCCTCTTGCTT

>Sequence 2546

>Sequence 2547 GCGGGAG

>Sequence 2548

>Sequence 2549

AGCGGCCGCCGGGCAGGTACGCGGGGCCACCTAGGTTACTTGTAGGAC
CCTATACGGCAACCTCCTTTGCCAGGAACTATTTATAAACATCCTGCAGG
AAAATGAGTCTATATGTCAGAATACACATTTCCCACCTTGCCCAACAGTA
GAAAAACATAAGAAGAGAAAAACATTTAAAAAAATGACAAGGAAGTTAATG
GAAGTCAGCAATGTGATGGTGTTTTGGAGGTGGAGCCTTCAGAAGGTAATT
AATGCCCTTGTAAGAAGAGGCCAGAGAGCTTGCGCACCTTCTTCCTGCCA
TGTGAGGAGCCAAGAAGCCGGCTGTCTGCAACCTGCAAGAGGACCCTCAC
TAGAAGCTAGCCATACTGGCATCCTCATCTTGGCTTTCCAACTTCCAGAA
CTGTGAGAAGCATATGTTTGTGGTTTAGTCAATGGTCATGGTAATTTTT

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TTATAGCAG

>Sequence 2551

AGGTACGCGGGCTTCTCATGCTCCGTGATGCATGAGGCTCTGCACAACCA CTACACGCAGAAGAGCCTCTCCCTGTCCCCGGGTAAATGAGT

>Sequence 2552

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AAACAACATGAATCTGCATTTCTTGGATGAGATAGTTAATAACAAACTAT TTCTCAATATTTGTATACTAAAAACTAGTGAAGGTGTTATGTGTTTCAGT ATCTTATCTCTTATTTGAACATGGGTTTCTGAAAGGAGCCTATATAATAA TATAAATGGTATGTAGTAAATGAGGCACTGTCTTGGCTGGGACTGCTATA AAAAAATTACCATAGACCATTGACTAAACCACAAACATATGCTTCTCACA GTTCTGGAAGTTGGAAAGCCAAGATGAGGATGCCAGTATGGCTAGCTTCT AGTGAGGGTCCTCT

>Sequence 2554

CCGGGCAGGTACATGTAGAAAATCCAGCAACGAAGAGCCATGGCTCACTG CTAATCACATAACACACACAGGAGTCTATTTATGCATGGAATGTGGCAGA TTTTTTAACAAGAAGTCACAACTTGTTATACACCAGAGAACTCATACAGG AGAAAAAGCCCTATCAATGCAGTGAGTGTGGAAAAGCCTTTTCACAGAAG TCACTGCTCACGGTTCATCAAAGAACTCACTCAGGAGAAAAACCGCATGG **GTGCAGCGAATGTCAGAAAGCTTTTAGTAGGAAGTCACTCCTCATTTTAC** ATCAGAGAATTCATACTGGAGAGAGCCGTATGGATGCAGTGAATGTGGA AAAGCCTTCAGTAGGAAGTCGCAGCTTAAAAGACATCAGATAACGCACAC AATAGAGAAACCCTA

>Sequence 2555

AGCGGCCGCCCGGGCAGGTACAGAGGACACACATTGTAGACAGGCCTGTG TCATGTTTCCTTACAGTCGTTTTTTTACAGAGAAAAGGGGCATTGTTTTTT CACTGCTTTCTCAACAGTTTCCTTGTGAATAAATGAAACATTTCGGAGCT TACCCTGAAAGCAAAAAGCCCTCAACTTTGTTTTTTGCGAGTGCCCCGGA ACCATTGTGTTAGTGTGAAATTCTTGGTTGCTTGCTGGGGGGCCCAACTT TACTTCAAAGATGCACAAACCTGGAAGGGCCTTGTATTGCTATCCTTTAC CCACTTCGCCTTTCACCCAAGCACCGAACCTTTCTATGGTCTCTCCCTAG CGCACAACTCAGGAGCACGCTGCAAAACCTGCTTTTTCAAGTGGCCCTCT AGGCATTTGCTTGGGCAAGTAGTAAATTCCTTTACCCAGGTGTTCTTCAA CCCAACTCTTTTCCCCCTCCTATGACAAAGGGGCCAGTCTTGCCCAAGCC ATTTGGTTGACTTTCTGACCCAGG

>Sequence 2556

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>Sequence 2557

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>Sequence 2558

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## Table 3

AGGTACTGGCCCTGGGCCAATGCGTCCTCGCTGGAGCCTTTGCCTCCTTC
TACTGGGCCTTCCACAAGCCCCAGGACATCCCTACCTTCCCTTAATCTC
TGCCTTCATCCGCACACTCCGTTACCACACTGGGTCATTGGCATTTTGGAG
CCCTCATCCTGACCCTGTGCAGATAGCCCGGGTCATCTTGGAGTATATTG
ACCACAAGCTCAGAGGAGTGCAGAACCCTGTAGCCCGCTGCATCATGTGC
TGTTTCAAGTGCTGCCTCTGGTGTCTTGGAAAAATTTATCAAGTTCCTAAA
CCGCAATGCATACATCATGATCGCCATCTACGGGAAGAATTTCTGGGTTT
AACCCAAAATGCCTTCATGCTACTCATGCGAAAACATGGTCAGGGGGGGT
CTTCCGGAAACAAACCT

>Sequence 2560

>Sequence 2561

>Sequence 2562

AGGTACGATATATAACAATGAGGTGCTCCATCAACCACTTTCTGAAGCTC
AAAGGAAATCCAAAAGCCTAAAAATTAATCTCAATTATGCAGGAGATGCT
CTAAGAGAAAATACATTGGTTTCAGAACATGCACAAAGAGACCAACGTGA
AACACAGGGTCAAAAGAAGGAAGCTGAACACATGTTTCAAAACGAACAAG
ATAATGTGAACAAACACACTGAACAGCAGGAGTCTCTAGATCAGAAATTA
TTTCAACTACAAAGCAAAAATATGTGGCTTCAACAGCAATTAGTTCATGC
ACATAAGAAAGCTGACAACCAAAGCAAGAATAACCATTGGATTTCATTTT
CTTGAGAGGAAAATGCAACATCATCTCCTAAAAGAGAAAAATGAGGAGAT
ATTTAATTACAATAACCATTTAAAA

>Sequence 2563

AGGTACGCGGGCTTTCCCCCAGTGCAAAAGACTGTTACTTTATTATTGTA
TTCAAAATTCATTGTGTATATTACTACAAAGACAACCCCAAACCAATTTT
TTTCCTGCGAAGTTTAATGATCCACAAGTGTATATATGAAATTCTCCTCC
TTTCTTGCCCCCCCTTTCTTTCTTCCCTCTTTCCCCTCCAAACATTCTAG
TTTGTGGAGGGTTATTTAAAAAAAAACAAAAAAGGAAGATGGTCAAGTTTG
TAAAATATTTGTTTGTGCTTTTTCCCCCTCCTTACCTGACCCCCTACGAG
TTTACAGGTCTGTGGCAATACTCTTAACCATAAGAATTGAAATGGTGAAG
AAACAAGTATACACTAGAGGCTCTTAAAAGTATTGAAAGACAATACTGCT

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**GTTATATAGCAAGACATAAACAC** 

>Sequence 2564

>Sequence 2565

AGGTACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTCGGGGTTATGCCCGCCTCTTCA CGGGCAGGTCAATTTCACTGGTTAAAAGTAAGAGACAGCTGAACCCTCGT GGAGCCATTCATACAGGTCCCTAAGGAACAAGTGATTATGCTACCTTTGC ACGGTTAGGGGACCGG

>Sequence 2566

AGGTACATATTCATTGTAGACTTCCTGTGGATGAGCATGAGCTATCATGA CCTCTTCTTCTCCAAGACTGCAGGCTGCTGAGAATCAAAGTGGGAGGGC TCTTGTGAGTCTGCTCAAATAGCCTTCAGTTCGATCATCTGTATCTAC TTTCTCCCTATTTGTGGAAAGTTGAAATTCATACTTGGACAACTGCTTCT TAATCTCCACATCATCATCATCTTCAGGTTTCTTCTGATTCTTTTTCTTC TTATCTTTAAATTGTTTGATCAATGTTGAGGACATGTTCAACAAGAAACAT GAAATACAGGCCTTCTAGAGCTGTTAGACCCTTCCACGTGGAATCAAAAT AGGCCCTTTCTTCTATGTTTTGAGAAGACAGATGACTGAAAAGGGGCCCT TTTTCATTTCCATGCTTTGGTCTTA

>Sequence 2567

>Sequence 2568

>Sequence 2569

CCGGGCAGGTACGCGGACAGCGGCTTCCTTGATCCTTGCACCCGCGAC
TGAACACCGACAGCAGCAGCCTCACCATGAAGTTGCTGATGGTCCTCATG
CTGGCGGCCCTCTCCCAGCACTGCTACGCAGGCTCTGGCTGCCCCTTATT
GGAGAAAGGTGGTTTAACAAGAACAATCATATTCCACAAGAGGATTAAGA
CCTGAATTACAAAGTAACTTCTTTCAAGGAGTTTCATTAGAACGACAATG
GCCCACTCACAGAATGGCCTATAGGATGGAAATTGGAAAGGAAATTGTAA
TGGGGTTAAACACAAAACGGGTTTGAAAAAACTTCTTGAAGCAAATTGTTG
GGAGAGTTGCAAAAATTGGCCAAATTAATTAATTTAGGACACCTAAAGGC
CTTAGGAAGGGAGTGTATCGAATTATTCAAAAAATTTAAAGGGCCGAT

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#### Table 3

AGGTTTTATTTAACTAATTTTTTTTGGGAAATTGTTGGGTTCAAAAAACC CCAGCTTTAATTTGGGGAAGGTTTAAACGGGTTACCCTGGCC

>Sequence 2570

>Sequence 2571

AGGTACCGAGCATGAACATCTGCAGCCTCTTGCAGAATCACCCCAGAAGG GGACTGAATCATGGTCCTCTTGATAGGTATGTTCAGCAGAGTTTTCCAGTC CTGAGGTGTATGAGGCCAGCTGGAGCTCATAATCCTTAATTCCCGCGTAC CTGCCCG

>Sequence 2572

TGGCCCACCGTGCAAGCTTCCACTTGGTGCCTGCGTGGGAACGCACCACC TGCCGTGGAACTTCCTCCTGCGGGGCAGAGGAGGGGTCCCCCGCGTACCT >Sequence 2573

>Sequence 2574

CCGGGCAGGTACAGCAGGGGTTGCTTTGGTCATTGCTGTTGAACAGTG
CACCTCCTTTCTTGACTGTATGCACCCATTGTTGATATGACCTCGGGTTC
CCTCCACAAAAGCCACCTGAAGTGATCTCTTCTTCAAATACATCAGAGAA
ACCCCTTCCTGCATTTAGTTTTGCCAGTCGACCATCGATAAACTGCTTAA
AAAGCTGGAGGTTAACGGCAGTTTCCAGGAACTGTTTCATCACGCTTGAG
CGGTGCTTTACAAAACTCTCCTCACAGAAAGTGATGGGCTCACCAGGTTT
GTATCTCAGTGCATCTCTTAGGAATCCAAACAAAGCAGCCTGTGCTCTA
AGAAAGGCCCTAGCTACTCCATCACCCGTAGCTGTAGACTGCTTCTTCAG
TTTATTTTTCAAGGCCGAGACCACATCACTTGGTAGGTTG
>Sequence 2575

>Sequence 2576

>Sequence 2577

>Sequence 2578

CCGGGCAGGTACCCGGGAGGCTCGCATGTGTGGGTGCATGCCGTGGCAGG

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## Table 3

AGAAGGCACGTTTATCCAGAGAGTTGATTCTCCTTAATACCAGGAAACTA GGCAACAGCAGGGGGGGACAATCATGAGTCCTAGGCAGGAAAGGTCCTC TGGAGAGAGGAAATGGCACACGCGCCCCCGCGTACCT

>Sequence 2579

>Sequence 2580

AGGTACTTTTTTTTTTTTTTTTTTTTTTTGCCCCGCAGCTTTTATTAGCCATC
GTTACAGTCTCCGTCCACAAACACTGCCCAGCTCCCTTCCCAGGGCACT
TTACTGGAGGCAAGTGCAAAACACTGTGGTGCTTTCTATTCAAAGAAACA
GAAGATGTTGCTGTGGGGGTAACGGACAGCCCAACTACCCACCAGTTTTA
CAGCAGGATCCGCAGTGAGCTTGATACAAGATAGAGGATAGATGACGGTAA
AGGGGGAAAAGAGTTTAAAATTATCAAGTTTCCTTTGAAGTGTCTTTTC
CCAAGGCACTGTGAAGAAGACTGCTGCTAGCAATTTTCTAGGACTAAACA
CACCGATGGGAATATAAAATATTTCAAACACACACCCCTGTTACATTCTTAC
AGTTAGTTTCATCACTTAGGTCTCTTCTTAGCTT

>Sequence 2581

AACTGGCGCAGGGCTCACCCCGGGGCGGCCCGACCGTTCTCATGGCCAAA ATCTTCCAACAACCCAGATTTGAGGAGCAATGCTTTAAAACGAGGCATTG AAGGCTTTTAATCCGGGCCCCGGAAAAGGTTACAGGATGATACCTAAAAA TTCCTCAGGGGTAAAATCTGAATACCTGCCCGGC

>Sequence 2582

>Sequence 2583

AGGGTACTCTGGGTTGGTACCACTGGTTTCCGGGACCTTTTGGGTGGTTA CAACTGGTTTCCCGGAACTTTGCGTTGTTACCACTGTTTCCCGGGACTCT GCGTTGTTACCACTGCTTTCCGGGACTCTGCGTTGTTACCACTGCTTCCC GGGACTCTGCGTTGTTACCACTGCTTCCCGGGACTCTGCGTTGTTACCAC TGCTTCCCGGGACTCTGCGTTGTTACCACTGCTTCCCGCGTA CTCTGCGTTGTTACCACTGCTTCCCGCGTACTCTGCGTTGTTACCATTGC TTCCCGCGTACCTGCCCG

>Sequence 2584

Page 539 of 685 of Table 3

#### Table 3

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>Sequence 2585

>Sequence 2587

>Sequence 2588

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GTCACTCTCACCAAGAACTTCAGGGGTTACGACTTCAAGACTATTTCGTG
GTGAAACTCCTGAACTTGAAGTAGTTCTTCTTGCTCTTAAAATGGGATAG
CTGCCTACTTCTAAAGACTTAGTTAAGTCAAGGTCATGCAAAATTAAGAG
ATATCCAGAGGACGTTGAAATCAACATTTTGGAACAATCTGGTGTTAACC
TCATTCGCATGAGAAAACGTGTGTGAAAGAATTTCTTATGTGGACACCCA
TCTTCTGTATACCTGTTAGTGTCCCAAATAATGACATTTCCATCAAATCC
TGATGTTACTAAGAGTCTTGTATTAGTATCAT

>Sequence 2589

>Sequence 2590

GGAGTATCGACTCATCGAATTTCGGCGAATGTGCTGATAGGTCGGCGGCC GAGGTACGAACTTTTCTCCATAGGATACTTAGGTTGCACCTTTGTATTTG

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#### Table 3

TAAAACAGGAGCAAATTTGGACCTTGCCGGGCCAAAGTCGTGTCACGTGG
AACCTCTTAATCTCAGCATCCGGAGCTCCAGGAAGGGAAAATTTCAAGTC
AGATAGAATTCTATATATACCATTTCTTTGGAACCTTCAGCCCTCAAGAT
TCCAACATCATGACCTCAGTTTCAACACAGTTGTCCTTAGTCCTCATGTC
ACTGCTTTTGGTGCTGCCTGTTGTGGAAGCAGTAGAAGCCGGTGATGCAA
TCGCCCTTTTGTTAGGTGTGTGTCTCAGCATTACAGGCATTTGTGCCTGC
TTGGGGGGTATATGCACGAAAAAGAAATGGACAGATGTGACTTTGAAAGGC
CTAT

>Sequence 2591

>Sequence 2592

TGGAGGCGTCGCCTTTCTACTACTTAGGGCGAACTGAGCTCCTTTGGGGA GGCCGAGTCTTGCCATCCTTTTAGTATCTTTTTTTATATAAGTAAAGATT CACACAAATAAATTCACTTGAATTTGATAATTTGGAACATTGGCAATGAA TACAGTGCCTGTTGAGGCCTGAAAGAGAGAGAGAAACAGTGTGG GAGAAGAAAGGCAATCCTTCGTTGAAAAGCTTTTCTCTTAACAATCCTTA GTGCCTGAAAAATAAGCCATTTTGATAACAAGAGTATAAAAAAGCCTTATG ATCTGCAAAGTAAATCGTATCTGGTTTAAATTTCATCCCAAGTCTCAGGT TATGGCTGAGGAGCTATACTAAGTATCTTTGTAGCACATTTCTTTGAATT TTTATAACTAAGACAAGAAAATTTTTTTTATCAGATCTAGGCAGAAATACT GATCT

>Sequence 2593

>Sequence 2594

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#### Table 3

GTGCATAAATAACTTAACACAATGAATATGCCTGGCTATATATGATTAAT
AACTACAATGGCATACTGTTGTCAGACGTGGTCCATCTGTATAACAATGA
CGCGAGGGGGTGCTGTAAATGTGCCCCTCACAGATTAGGGGAACTCTACT
TAGAGTTAGTTTCTTGTCCACGAGTGGCTCTTTTATGAAATAGGAGCGTC
TCACAGGCCTGTACGGGTAGTGATATTAACAAATAGTTACAACCCTCCGA
TTCTAAGGTGGGGGATCGGGTACATCACACAGTATAGATGCTCTTTGAAG
AGGGGGAAAGAGCATACGATGTGGACTATTCAGTGCACCTAAGGGAATAC
CTTACGTTAAAATCGCTTATGCTCACAAATATACCGCGAAGATGTTCGAA
GATGTGAGGGTAATATTTATCTATATGACATGGATGCGCCAATTGCAGAT
ATGCTAATCATCTCGTATACTGTGACGAGACGCGAACTTTGAA
CAATAAGAGAAACCATGTATGTAGCAGACGCGAACTTGATATAATGACTA
CTACTCCATCGTTAGACGGAGCAGATTNCATTGTTAGGATCTATTCATG
TATTCATATATAAAACTAGAGTAGTGTTTATGTAGTACTGAAGATGGTA
TATTCATATATATAAAACTAGAGTAGTTTTATGTAGTAAGCTAATGACTA
GAGGTAAATACATCG

>Sequence 2596

>Sequence 2597

>Sequence 2598

>Sequence 2599

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#### Table 3

AACTCCACGAAGGCTTTTATTTTACTGCAGTATTTTCTGCACCTAGAACA GTATTGGTATATAGCAGTCACTTAAATATTTGTTGAATGAGTGATGTAGA GAAGGTTCAAAAAGCCACTGGAGAATGTCATGGCTTGACCG >Sequence 2600

CCGGGCAGGTACTGTGGATTTTTCATTTGCAAAGACGTTAAGCCCTCCAA
ATGTGCAAATCATGAAGTCAGTTGTTGTTCCAGCAAGGTTTGCCCAGCGG
TAAAAAACAAGATAAAACTAATGCACTAGCTGAAACCAGGTGGGGAGACC
ATGTGTGGTAGTGCTTGGGGGTGGAGGGAAACTATTTCTGAAATGAGGAC
TTAAAGTATAATACCAGCTTCACTGCCTGTTCACATGAGAAACCAAAGCT
TCAATTTAACTGCCGGCAATAGGAGTTACACACTGTCAGCACCAACTGTC
TAAGATCCAAAACTAGTATCTATATGTGTAGGATCAAAACCAAAAATCTG
GAGGGATCTAGTTAAACTTCAATATGCATGACCCCAGATTCCCCTTTAAA
ATATAGTCCAAGTATTTTATATTTTTGCATAGGGG

CCGGGCAGGTACCTTCTTTCTGGCAGTGAATGGTCTGTATTCCTCTAGTG
ATGATGTGATCGAATTAACTCCATCAAATTTCAACCGAGAAGTTATTCAG
AGTGATAGTTTGTGGCTTGTAGAATTCTATGCTCCATGGTGTGGTCACTG
TCAAAGATTAACCCCCCGATTGGAAGAAAGCAGCAACTGCATTAAAAGAT
GTTGTCAAAGTTGGTGCAGTTGATGCAGATAAGCATCATTCCCTAGGAGG
TCAGTATGGTGTTCAGGGATTTCCTACCATTAAGATTTTTGGATCCAACA
AAACAGACCAGAAGATTACCAAGGTGGCAGAACTGGTGAAGCCATTGTA
GATGCTGCGCTGAGTGCTCTGCGCCCAGCTCGTGAAGGATCGC
>Sequence 2602

TTTGTCTAATGATAGGAATTATTCCTTTAATTTAAAAAAATACTTTCAATT
TTTTAACAGTTTTTTCCTTACTTGTCCAATGGGATGTAGGAATTCAGAAT
GGATCCTGCCATTGCTTTGGTGCTGGCATTATCACTAACTGTGCCCAAGC
TGAACTGTGCCCCAATTTTTTCCAATTTTAAACTTGAACTTTGGGTCCGG
ATTTTAAAAACTTAGTGGATTCCCCCCGTGGCTGCAATGAAATTTTCAA
TTATTTAAAAGCTTTTATTGTATTACCCGTCAGAACACCTCAAAGGGGGTG
GGGTCCCCGGGTACACCCCAAGCTTTTTTTGGTTTCCCTTTTTAATTGAAG
GGATTAAATTTGCCGCCGCCCTTTGGGCCGGTAAATTCAATTGGGTTCA
ATTAGACCTTGTTTTTCCCTTGTGTTGAAAAAATATTGTTTTAATTCCCC
GCTTTCAACAAATTTTTCCCTCACCAAATATTTACCGTATGCCCCGTGGT
AGTCT

>Sequence 2604

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## Table 3

>Sequence 2605

>Sequence 2606

GTTGCGATCACTACT

>Sequence 2607

ATACCGAGGCCGGGGCAGCATAAAAGTTGTAAAAAGCCCTTGGGGGATGC CCTAAATGGAGTGGAAGCTTATACTTCCACCATTTAAATTGGGCGTTTGC CGCCTTCAACTTGCACCCGCTTTATTCCAGTTCCGGGGAAAACCCTGTTC GTTGGCCAAGCCTGGCATTTTAAATGGAAATTCGGGGCCCAACCCGCCGC CGGTGGGAGAAGGGACCGGGTTTATGCCGTTATTATGG

>Sequence 2608

>Sequence 2609

>Sequence 2610

>Sequence 261 i

>Sequence 2612

TTTGAGAAGCCAGCGCTCACCCACCCGGGGTCTCTGTGCATTGACCTTTG

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## Table 3

GGTGCTGACTTGGAGAAAAGCACAAACACGACCAGTCCCATCCTGGCTCC
CGTGGGGCTTCTTCTATCTACGCATTGTATCGACTGCATTAGTTGGACTA
AGAATGATGACCTCAATTTAAAGGGAAGGAAAACAAAAGGCTGAACTGGT
CTTAAGCAAGGAAATGGGTCCCAAAGCTTGGCAAAGTATAAATAGCAACA
ATCTGCAATAACATTTTAGGATTACCAAGGATAGGGGGCATGAAGCTTAT
ACTAGCTCTTGGGCGGGTATACTTGGCAACACAAATTTACCAATTTATGA
TTTTTTGGCCCTTGTCAAAAAACCTAATTCATATGAATAGTGAATTTACT
TGTGTTGGGCACAGGGGGAAGATGCTTCTCCACCTTGAAAACAAAAAACC
AAAAAATTGGGTCAAAGGTCCAAAAAAAAGATTCTATGGAAGTTGTATCCCT
AATATACCAAG

>Sequence 2613

TGGGACCTGCAATTACTACGCAAACGCTTACAGCTTTTGGCTCGCCACCA
TAGAGAGGAGCGAGATGTTCAAGAAGCCTACGCCGTCCACCTTGAAGGCA
GGGGAGCTGCGCACGCACGTCAGCCGCTGCCAAGTCTGTATGAGAAGAAC
ATGATGGAAACCTGGACTCAACTTAAGGTCACACCATGGGTGCTACTTTC
TTCTTTCTTTTTTTTGTTAACAGCAAACCGAGACCCTAAGAAATTATAGTCC
ATGTGGTACCCTTCGGTCCCGCTTCTAGGAAACTAGGGTGGCATGTCCCC
ACGGGGTCTGGACAGGGAGATATCGCATTATTCATAAGCCTTAATGCGGA
ATATCCCGATGCGAACCCTTCGTAGTGAGGGGCGTGCCCACGGGATACCC
GCCAGGCTTTTTGGATTCCCCCTTTTAAAGTTGAAGGGGGTTCAATAAG
TTGGCCGCCGGCTTATTGGGGAGCTTAAATTCAGTGGGGTTCAATAAG
>Sequence 2614

>Sequence 2615

>Sequence 2616

>Sequence 2617

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## Table 3

AGGAACCCATTTGGGGTTAAATTTTTTTTTGGGGGGATTTCAAATAAAGTT TGGTTTATAAAAAGCAAACAGGGCCAACGTCCACACCAAATTTTTGATC >Sequence 2618

>Sequence 2621

>Sequence 2620

>Sequence 2622

AGGTACGCGGAGAGTTCTGCCTCGCTTCCCGGCGCGGTCGCAGCCCTCA GCCCACTTAGGATAATGGCGACAGCTGAGGTACATTGTGATACAACTTCT TCACAGATGAAGGCCAGCAGAGACAGCAACAGCTGCAAGCCCTTGAGAAC GCGCCGGAGCAATGGGAGCCGGCCCATGAAAAAGTAGGCAGCGAGGCCGC TCCGGGGGCCTCTGGCGGGGCCCGGGTCCTCCTCCGTAGTGGGGCTGTAC CTGCCCG

>Sequence 2623

>Sequence 2624

CCGGGCAGGTACGCGGGCAGATTCATGTTGTTTCTAATTTTTATATAT

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#### Table 3

>Sequence 2625

>Sequence 2626

AGGTACTGTTCCCTTCTGATTTGGTCTAGATACCAGAATCCATTCTCTTC
CGTCAAACGGAAGACACAAGGCACCTGAGGCTGATCCTTCCCAGAAATTA
ACTCCAGAGGCTGCCACATCTGGTATGAGCGTCCAAACCCAGCATCGACA
ATGTAGTTCCTGCCATCAATGGTCACCTGCAGGAGAAGGTGAATCATGCC
AGTGCTGTATTTTTTGGCTGGAGTGCTGTAAACATACCCTCCCAACATCG
TGGTCTCAAAACCAATAGTGGTCAGAGCCCAGTACAGAAGATGATTGACC
TGGAGACACCATCCACCCCGATTTCTTCTCACAACTTGATCAAAAATGGC
CTCTAAGCCTAAGTCCATGGCATCCCCACAATGGATGTTAAGGTTCTCAA
AGGGAACAGCTCCGGATCTGGTGTTGAAGAATGTCAGTTTAATGTTT
>Sequence 2627

AGGTACTCCGAAACAAGTAGAAAAGTGCTGTTTGAGGGATTTTATTAAAT CTTTTTTTAATGGAATGTGGTACAGTTAGCTGTCACTCAGCTGACACCAT GATGTGGCAGCAGAGAGGGAAACCTACAAGTGGTTTGCCTCATTGCCTTT GCCACATCTGAAGTTCTCAGCAGCAC

>Sequence 2629

AGGTACTTCCTCACAGTTCTCACATATGGAAAGGATACACACTTTGTAGA AACAAGAACTTTATGTTATCCAAGTTCTAGGATAGCCATGAGCTCCAATT

Page 547 of 685 of Table 3

## Table 3

ATCTCAGAGCTCTGAGTCCTCTACTCAATACCCATTGAGATTTATGTGTT CTGAGGCTTTTGTCTTCTAGCTACTTACTTCATTCTCCATGGGTAACGTC ATTCATCCACATTAACTAATTTCCTCACTCCAAGCTCTTTTCTAGAGATA ATCTCCAGTCCCTGTGCAGAAACTGTCATTGCACTTTCTGCTGAAATGGC AGTTTCTCCAGCAAGGTGAGATTATGGAATCCAGAATCTTTTTCAGG GGTCACATGCCCATTTCCCCACTTGCATGAATGTCGACACTGCAGCCACA GTTTTGGCCGTAAATGTGAATTTGGCAAGTAACCAC

>Sequence 2631

TTTAATATCTCATGATTTTGTGGTCAGGAATGTGGACAGAGCTCAGCTGG GAGATTGTTCCACTCCATGTAGCATCAGAAGACAGGTCTCTTGGTGATAT TCAGCTGGAGAATAAGTTAATATGCAGAGTTCAAGATGGTTTCACCTCAC ATTGACACCTTGGCAGGGATGGCTGGAGGGCTCAGCCAGATCAGT TAACTGGCGTGCCTGCATATGCACTCTCCACCCATGGTGGTCTCTAGAAT TGACTTAAATCTAGAATTGGCGATGTATCCCCGCAGTCAGCAGCTGTTTA CGGAACACCAGCTGCAGGCCAGGCACCGTGCTGCAAGGCGTAGATATGTT GCTGAACACGACTCCCTTCCAGATGTTCAGGATTTAACAGGCAAGTTAAC **AGAGG** 

>Sequence 2632

AGGTACACTTCAGTCTCAATTCTGGAACTCTAAGAAAAAACGTTCCAGAC TTCTACGCAGCTGCCACCTCGGAGGACGGGAGAGCGGGGGACGAGGAAAG ATCAGGATAAGACCCTAACTCCCACAAA

>Sequence 2633

AGGTACTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGGAGGCTGGAGTGCAG TGGCGCAATCTCTGCTAACTGTAACCTCTGCTTCCCAGGCTCAAAGGATC TTCCCACCTCTCCTTTGTTTAGCTGGGACTACAGTAGGGCACCACCATGT CCAGCTAATTTTCGTTTTTTTAGTAAAAATGGGGGTTTTGCCATGTTCCT CAGACTGGTATCAAACTCCTGGCCTCAAATGATCTTCCTACTTAGGCTGG CCAAAGTGCTGGGATTACAGGCATGAGCCACCATGCCTGAACTTTAAAAA GCATTTCTACTATATGTTTTTCTTTTTGATTACCAAAAAACTTCTATTAA AAATCTTTTAAAGTTCATTCAGCAGAAGAAGGAATTAGTCAACTTTAAGA CATGTTATTTAAAATTAGCCACTTGGGGAAACAAT

>Sequence 2634

CCGGGCAGGTACGCGGGAAAACGGAGTCCCTGAAATAACAGATGCAGCC ACAGATCAGGGCCCTGCAGAAAGCCCACCCACTTCCCCTTCATCAGCCTC TCGGGGTATGCTGTCTGCCATCACCAATGTGGTTCAAAACACAGGTAAAA GTGTCTTAACTGGAGGCCTTGATGCGTGGGAATTCATCGGCAAGAAAACC ATGAATGTCCTTGCAGAAAGTGACCCGGGCTTTAAGCGGACCAAGACGCT CATGGAGAGAACTGTTTCCTTGTCTCAGATGTTAAGGGAAGCTAAGGAGA AGGAGAAGCAGACTGGCACAGCAGCTCACGATGGAGAAACCGCGCAC TACGGGATGCTGTTTGATGAATATCAAGGCTTGTCACACCTGGAAGCCCT GGAAATTCTGTCCAATGAAAGCGAAAGCAAGGTTT

>Sequence 2635

CCATGGTGTGCATTTTGGCTTTCAGGGTATAAAGGGGGAAACAATAGGGA AAGACTTGGTGCAAAAGGGAAGGAACAGAAACCGACAGATGAGAAAAGGA AGATGACAGCATTGCAAGTGTTTCTTTCAATCCTTGCCAGGCCAGGCTTT GTTTAGCTACCCTGGTCTCTTCCTGCATACCCCAGCCCCCGTTTACCTGG GGAATGGGGAGCAAAGAACAGGATCAGAGCATGATCTGAAAAGAACACTG AACCTTCTCCCTGCTGGAACCCCCACCCCACCCCGGGTACCTT

>Sequence 2636

AGGTACGCGGGATATACAGAAATGAAATGACACTTCTGGGAGGCAGTAGA AGCAGGAAGTCAATGAATTGAGTAGAGGGTCCCATTCCCTCAGGCTGTCA TTGATCAGTGACAATTTATAAAAACAAACTGCAAAGTCTGTGGCAAGTGG CTGCCTGCTTCCTAGAAGGAGCCCATGAAAGGTTAAACTCTGTGGTCGGT

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#### Table 3

ATTTGCAAGCGCCGGGCGTGGTGGCTCACGCCTGTAATCCTAGCACCTTG GGAGGCCAAGGCAGGCGGATCACCCGAGGTCAGGAGTTTGAGGATTTGCA AGCAAAAGGTCCTCTCCTGAGTCTTTCCCAGATACCCAGCAGTGCAGAGG CTAGCTGTGGAAGGTTGCCATGGGACCAGAATGGATTGGATGCCTTGGCT TACTTGTCACCATTGGAAATTTCCAAAGAATTGGCCTTACCG

AGGTACTAACAATGCAGTAGCCAACAAGATTACCATGCAATCATTAAGG AGAACCAAAGTAAGAGAGCCACTCAAACCAGATTTTGAACGCTACTAAAA TTAAAGTAGTCTTTGATGAATATGAATAGAGTAGGGAAAGGATTCTTTGT AATAGTGATACCTTTGTGGTTAGAAGAAGAGGGTGGTATGTGAGTTTTAGTC TACAGATTATGGCAAATTCAGTGACAACAATCAAATGGTCTAAGATTGAC AGTGGCACAGTTTTACTCTGTGAAGGTAATGTTCAGGACAAATTCAAGA AAACTAGAAAACCATTCTTTACAGCTGAAATCTTTCCCTAACCATTGTTA TTTCCACTTTTAAGTCCTCAAGAGATGAGAAAAGGGAGGTAAGGCTTCCT TATACATTTCCTGCACAATGAAACATTTTTCCTCCTCCAGGCAAAGATTC AAGCT

>Sequence 2638

CCGGGCAGGTACGCGGGAGGTAGAGCGCCGGGACCTGTGACAGGGCTGG TAGCAGCGCAGAGGAAAGGCGGCTTTTAGCCAGGTATTTCAGTGTCTGTA GACAAGATGGAATCATCTCCATTTAATAGACGGCAATGGACCTCACTATC ATTGAGGGTAACAGCCAAAGAACCTTTTTCTGGTCAACAAGAACAAGTCA TCGGCTATTGTGGAAATATTCTCCAAGTACCT

>Sequence 2639

>Sequence 2640

CCGGGCAGGTACGTGAAGGTGAGAGAAAAGCTGCCAAGCTGCATTTTAGT
CAGTTGGGCAACAGTGAAAATTTTCTTTTAGAGGTGGAAAAAAAGCCTCTC
TCTAGTGACCTGGGTAGTTTGCACGGTTTGGCTGGAAACCACAGTCCCCC
CATCTCTGCCAGAACCCCCCATGTGGCCACTGTCCTCAGACAGCTCCTGG
AGCTTGTGGATAAGCACTGGAATGGCTCCGGCTCCCTCCTCAACAAG
AAGTTTCTCGGAAAAGTTTGAAGCAAAAACTGGTCAGAGTGCTGGAGGAAA
ACCTCATTTTGTCAGAAAAAATTCAACAGTTGGAGGAAGGTGCTGCCATC
TCAATTGTGAGTGGGCAACAGTCACATACTTATGATGATCTTCTGCACAA
AAACCAACAGCTGACCATGCANGTGGCTTGCCT
>Sequence 2641

>Sequence 2642

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## Table 3

TCTGGAAAAAGGCCTAGACGAGCAAAAAAAACTGTGGGGGGGACTCGGA AAACTAGGAAAAGATGCACTCCAAGATCTATAAAGCCGTGTGTTAAGGGG ACCCCCATTTACATTAAAACACGCTTTAGTAATAAACCTCTGGCCCTTT TTACAACTGGGGATACCCCGGGTTTTCAAA

>Sequence 2643

CTGCATGCAAGCCTTTCCAAACTGCGGGATTCGGCGGAGGGACCAAGGTG GAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCATC TGATGAGCAGTTGAAATCTGGAACTGCCTCTGTTGTGTGCCTGCTGAATA ACTTCTATCCCAGAGAGGCCAAAGTACCTGCCCG

>Sequence 2644

GAACGTTCGACCTGTTACACTTTTTAGGGCAATTGAGCTTCCCGCGGTGG CGGCCGAGGTACGCGGGGACACCCTAGATCCCAAGATCTCCAAGGATTTG GTGGCATACCCACTCCAGCACACAGAAGCATGAGGTTCATGACTCTCCTC

>Sequence 2645

>Sequence 2646

CCGGGCAGGTACATAGACCCAGCCCAAGGTTGGCCTTTGGGGTCTGATAG CATTCACAGAGCAGGAGATTCACCCTTGGAAGCAATTGAATGTGTAAACT CTGAGAGCAGACACTGACAATGCAATGCCTGCATACCTGACTCCTGGGCT GCCTTCCTTCTCAGCAGAGCCCACTGAAAGTCTCACGTGTGCCTTTAACC AATGAGGATGGCAGGCCTTATCTGTGTTTGAAGTGGACAGGTCATTGCTA TTCGACTCATTCTTTATAGGGACATTTCAGAATGATGAGTTGGCTAAAAT TTACTTTAAAGGGGAAATGTAAAATTACCTCTTCTTTTCCTATCCCCTTC TTCCTTTCCCATCCTGAGCCCTCTGGCAAGGCCTGTTGCAGCTCAAGAGT TTTTGGTCAGATTACAAGTTACCAAATGGTCAACAGGGAAGGACCCACAG CAGATTCCAAAACTCTTTCATTCACTTGAATTAACTGAAATGGCTCCTTC TTTGAGTAATTGAAGAGTTTGAGTTCTAGCCGTTTGCTGGTGTCTTCAAA ATTTGGAAAGCGCGACAAATGGCCTTGCTTCTGGAAATACATTGGCAGCA GAGGGCCTCGACCAAACCACCATTTGTTTGTT >Sequence 2647

CCGGGCAGGTACGCGGGGGCCTCACAGATGATGACTTTCTTCATCTTCTT GCTCTTTTTCCCATCCTTCACCGGGGTCTTGTGCACCCTGGCCATCACCA TCTGGAGATTGAAGCCTTCAGCTGACTGTGGCTCCTTTTCGAGGTCTGCC TCTCTTCATTCACTCCATCTACAGCTGGATCGACACCCTAAGTACCT >Sequence 2648

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## Table 3

AATGACAAATTCCAGGTTTAATCTTACATGTTACACCCTTCTTGAGCACT
TATTTTTATAAACTCTAAATCTATTTTGGGCTAAATTAACCTTTCTTAAG
GAAGATTTAAAATTTTTTTAAAAGAAGTGGACTTCTGGAGTGGACCTTGT
TTATTTTTACAATTTAAAATACCTAATTAAATAGTCCTTTAATACCTAAC
GGTTTCTTCAAAATTAAAACATTGGTTGGTT

>Sequence 2649

>Sequence 2650

>Sequence 2652

AGGTACGCGGGATGTTTGCCACTTTGCAAAGGAGCTCACTGTGGTGTCTG TGTTCCAACCACTGAATCTGGACCCCATCTGCGAATAAGCCATTCTGACT CATATCCCCTATTTAACAGGGTCTC

>Sequence 2653

>Sequence 2654

ATTCCCGTTACAAATACAAACACACCATACGAATCCTGGGAGCAATAAAGGTGTAAAAGCCTTGTGGTGCTCTATATGAGTTGATGCTAACCTCAACATT

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# Table 3

AATTTGCTGTTGTCGCTTCACATGCTCCGCTTTATCCAGTTCGGGGTAAA
ACCTTGTCTGTTGCCAGTCTTGCTATATAAATTGAAATACGTGCTCAAAC
TGCTGCCGGTGGTAGGAGTGCAGGATTTTTGCCGTTATTTTGGAGTCTGC
ATACTTACTCGCCTATCACATTCGACTTTCACATTGAACTTCTGCCTGGC
TGACTTTCGTGTACTGGTTTACGCGTCATGTCAGCGTCGGAAGACTGGAT
AATTCAAGGCTTTCAACATTCAAAAGTGGCCGTGTTATATTAACCGTGTT
N

>Sequence 2655

>Sequence 2656

>Sequence 2657

TGATTTCGTATACACT

>Sequence 2658

>Sequence 2659

>Sequence 2660

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#### Table 3

CACTTTATTTACGATATCTGGGCTCTGTGGAATATTCT

>Sequence 2661

>Sequence 2662

>Sequence 2663

AGGTACAACAACAAAGTCTGCCCACCTTCTTGTGTGCACCTCTGTGATCA
GAAGTAGCAATCAGTGATCGGATGCAGATCTCTAATATTTGGAAGACAAC
ATCCTTTTTGCCCACCCTGGAGCCCATAGGCTGCATGCAAGTTTCTCCAA
GAACTGGGGGATGGGTAGCTGCTACCGTTTTAAGAGCTAAAATTAAAATT
AATTGTGCTTTTACCTTATACCTTCCCCTGGAATTTTGCAAGCTTACAGTA
GACTCCAGAGTTGCAAAAATAGTTACATTAGGCAGATTTTGCCAGTATAA
TTGTTGTCTAGGAGCACGGCCAGACTCCTGGTGCTTTCTACCCTTCCATC
TTCCCCAACCGCTAGTTATTGAAACTTACTTTAATACAGGAATGTAAGCA
GTTTACTTTGTGTTTTTTCATTTTCATCACTTATGAAATAATGTTGACATT
GCTCTGTTGAAATCTAGTGTTATTTCAGAGAAATCATCTTCAAAATAATGTTGACATT
TTTTTATTTCTTTTCAAATTACCTGTCTCTAAAGATCTGGGCCCAGTTTGA
TTTTTATTTCTTTTCAAATTACCTGTCTCTAAAGATCTGGGTGCCCCGCT
ACCTGCCCG

>Sequence 2664

>Sequence 2665

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#### Table 3

AATAGTAGTGACCACCAATACTTAAGGAAAAAGGATAAAGTACCT >Sequence 2666

CCGGGCAGGTACTTGAAGTGTGACTAATGTGACCAAGGGAACTGAATTTT
AAATTTATTTACTTTAAATTAATTTAAACTGAAGATAGCGACATGTGGC
CAGTGGCTACCACATTGGATACAGCCTTAGATTCCTCCCAGACCAGACAA
CCTTTTGGGGGCTTCCAAGGTGGCAACAGCAACTCACACTGTGGGCAGC
CAGGCCTGGAGTGGGCCCAGCAAGCCGCATCCTGGGGTCAGGTCTGGCC
AACTAATTATCTACTGTCTATGGTCACATTAGTGCTACAATGGCAGCATC
GAGCAGTTGCAACAGAGATGGTGTGCCTGCAAAACTGAAAATATTCATA
TTTACTATCTGGCCCTTTACAGAAAAACATGCTGACCCCTGCACTACAGC
AATTAGTTTTGGAGAGAAAACATTCCTGATAAAAAGCTTACATCTTCTCTCAA
AACATGACACGCAATAGCAGTGGG

>Sequence 2667

CCGGGCAGGTACAATCTCTGGCCCTACATTTTCTAAATGTTATGCCACCC CGACCAAGGGGCAACTCCTACAAAGCCAGGCAAAATAATAAAATCATATT TGTCTCTAGTGGAATGGATAACTATGCCTAAAACTGTGCCCTTTGAAAAG CAACTAGAGAGATAATTTCTGAAGTGTTTTGTCCCTACCTGAATGTGTGGC AAAATTCTAAACTCCCTGAAGTGTGAAAGTGGTTTCCAAGCCACATGCAC ATCCAGTAGTGGTAAAGGGTGAAAATCTAACTGGCTAAGAAGGCTTCATA GCAACA

>Sequence 2668

AGGTACCTGAAAGTGACGGGGAGAATGGAACCAAGTTGGAAAACACTTTG TCAAATTCAGGAAATACAGAGAACGCTGCAAAGATACTCCTTGAGAAGAG CAACTCCAAGACACATAATTGTCAGATTCACCAAAGTTGAAATGAGGAAA AAATGTCAAGGGCAGCCAGAGAGAAAGGTCGGGTTACCCACAAAGGGAAG CCCATCAGACTAACAGCTGATGTCTCGGCAGAAACGCTACAAGCCAGAAG GAATTTCATATCCAGCCAAACTAAGCTTCATAAGTGAAGGAGAAATAAAA TACTTTACAGACAAGCAAATGCTGAGAGATTTTGTCAACAACATTTGAAT ATTATAACCTGCAGGGGTCTGTCCTGCAGATGGTTGAGACACATAACCAG ATACTGATATTCAGTGAAAGAGCAGCAAGGATTCCGAGCTGATTACAGAC ACCAAGGAAGATGCTGTAAAGAGCCAGCAGCCACAGCCCTGGCTAGCTTG CCCTGTGGGCATTATTAATAAGGTTTAATGACAAAAGCTTTGAGTCACAC AACCCGGGGGTAATTAACCTGGTCATCCCCACCTGGAGAGCCATTCTGCC CATGGGTGACAAAGAAGGACATATTGCGGACACCTGATGAGGTGGACCTT GCGGAAAGACACTTGCCCACTTAAACTTTGTGGAAAAACACTGAGAAGGT TGACCCTGGTGGAAAGACACTGACACGGTGA

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#### Table 3

GAGTGAGCACTCACTAGTAGTTTTTAATAATAAACCACGTAACCAAAGTG AGATGAAGGAACTATTTTTGGACAACTGGGTCAGTGTGTGAAGGCCCCAA GTCCTGGAGATGTCAGTAAGGATGTACTCTGCTCAGCTTTATGAGAAACG TTTACCCACACACTAAGACGGTGATTCTGACGCGGGAACATATCCTGGGA TCCATCAGGGCCTCCCCGCGTACCTGCGGGGGGTCCCATTCCATAACGTT ATTGTATTTTCAATAGTTGGAAATATGATCCCTTTATCTGTGTTATACGA ATATTGAATTGTATGTTGGAAAATTGGATTTCTCGAACTCAGGATATT CTAATATTCTAATTATCCGAAGCTCACTATTGGGTGAATACCCTGCGGAG ATTTAAGAATGAGTTCTACGCTTCATTAAAATGTATGTAGCTTCAATTGT CCTATTCTTATACGCGGAAGGAAATCTTATATCAGTCCAATCATATTATC TTCACTACTACCTGGGATGGAATGATAGTTGACATTATTGCGTCACTTTT CTTGCCATAATTCTTATTATTATCTGGCTTTGTCGTTAGTCTTGAAGGAA GTGTTGATAGGTTCCGTCATAGCATTTATATCTATTCTCTTCTATAGATT ATGTGTATTTCCTCTATATTATTTTTCGTTTGTGCTTTACTTTTAAATGA CTCTTTACACGATCAAATTGTTCTAAATTAGTTCATCTACTTAGCTG >Sequence 2671

>Sequence 2672

AGGTACAACGCCTGGAACGAGAAGCGCAGGGTCTACGAAGAATAGGGTGA AAAACCTCAGAAGGGAAAACTCCAAACCAGTTGGGAGACTTGTGCAAAGG TAAGACACAAATTATATATTGTTATGAAGCACTTTTTACCAACGGTCAGT TTTTACATTTTATAGCTGCGTGCGAAAGGCTTCCAGATGGGAGACCCATC TCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAGGGGA AAACTCATGCCTTTCCTTTTTAAAAAATGCTTTTTTGTATTTGTCCATAC GTCACTATACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTG GTGGACACATTTCATTGCAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTC CGCTTAGAGGTCCTGGCGCCTCGGCACAGCTGCCACGGGCTCTCCTGGGC TTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTGGCCCCTGTACCCG GGCAAGCAGGAACAGGTCTCTCTGCATCTGTTCTTTGAGGAACTCAAGTT TGGTTGGCCGAAAAATGTGCTTAATTCCCCCCTGGGTAATTTTTACCCAC CCTAGGAAACATTTCCAGAATCCTGTGATGGGAAGACCAAAGATCCTTAA GGAAGGGGGGGTTTTTCCAACCCGAGGATTTCTGAAAGGTCACAGGGTC AAATTTAAGGCTTAAGAACCTGTGAGGTTCAACCC

AGGTACAGGAGACTTTCTGATTTCCAATCTTGGCTCAGGTCAGAAGAAAA AGGGGAAAGGTTACATTCCTGGAAAGAAAATACAGCCTATTTGAGGGCAT GCCTGACTTTCAGTCCATGCACTAGTCCTCTTGGCTCGTAGAGTTTTCAG TGCCCTGAAACCATGATCCCTCTGCCTCCATGGTCCTCTGAGTGTAGTTA TTATGTCTGCAAACCAGTAATGTCACAAGTCAAAGGGTCTGGGGCTTCCC AGGGAACCACTATGACTGAGTATATTCTGATTTGAGAAACCTGTGACAAG

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## Table 3

TCTTCTCAGCACTCGCCTTCTAATTTTTTGGAGCCGATGCCTGGGTTCCCA GCATCCAGGTCACAGTAGCTGGAAATCATGCAGGAAGGGCAAAAAGCCAG CAGCCCAGAATGGACTGTCTCTGCAGCTCTGGCACATTCTCTACACATCG CCACACCACTCAAATGTCCTATAAAATATCAAAACCAATAACCTGGACAT GACCGATTAATCTGT

>Sequence 2675

AGGTACTTCAGTTTCTCTAGATTACCATGTAAGACAGCTCTGTGGATCCT
CTTCAGATGATACGGTTTAATGGGGTATTGGGGAAATGCGAAGCCATCCG
AGCACAAGCGCTCCATGAGGGTGGGCCACCTCTCCCGCTTGCCGTCTTCC
ATAATCGTCGGCTGCAAATTGTAGCCTGCAGCCGTATTTCAGCTCGCCTT
CGGGGATCGCCGCCTCCGAAGAGCAACAACGAGCAAAAGCAGTCTGTCCAC
GGACCTCCGCACAGACTCTCAGCGCCTCCCGCCTCTCAGCAGAAACGCCC
AACAGAAGGGTTAGAACCAGCGAGCACGCGCACCTTAGCCGGCCCTCCCC
GCGTACCTGCCCGGGCGG

>Sequence 2676

>Sequence 2677

AAGGTAATCGGGGGCCAGTCTTTATACTGCTGACAGTAATAAATTCCAAA ATCTTCAGACTGCAGTCCACTGACGACGAGGTGAAGTCTGTCCCAGACC CAGAGCCAATGAATCTGGCTGGGACACCAGTGGCCCTGGTGGATGCAGCA AAGACGAGGAGCCTGGGAGCCTGGCCAGACTTCTGGTGGTACCTGCCCG >Sequence 2678

>Sequence 2679

AGGTACTTAACTAGGGTTAGCCGAGGTCAGGAGGGTGGATGCCTTATTAT
GGGATTAGTGCCCTTCTAAGAGGGACAGTAGAGGGCTTGTTCATGCTCTC
TCTCTCCATGCACAAGAAAGAGCACACAGTGAGAAGGAAAGAGGCCCTCA
CCAGAACCTGACCATGCTGGCACCGTGATTGCAGACTTCCAGCCTCCAGG
ATTGTGAGAAGATAAATATCTGTGGTTTAAGTCACCAAGTCTGTGGTGTG
TTTTATGGCAGCACAAGGTAACCCAGATGATGCTTTTCACCACTGGGTGG
TCCAGCCTTTCATGGAAGCTGTCAGCTCCTCAGCCTTGCAAAAAAATGCTT
GCTGGTCACTCTCTTTGGTCCTTTCAGATGCCTTTCTTAGTGGTGCCTCT
ACCAGGCCCTTGACTTCN

>Sequence 2680

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#### Table 3

>Sequence 2682

TTTAGACATGCTAGACTCATGGTTGACTATACAACAACCATCTCAGAAAG AGTTATTAAGATATAGCTTCATACTGAACATAAATCATAGAATTAATGTG GTAATCAAAATAAGAGTTACGTAACTACTGACAGATATAAGGAAAGTCGT AACCATTCGGAACTAAAAACAATGGTATATGTTGCTGGACGAACACTGTG GGGAGGGTGAGTATGGCAGCATACCGTGATTTCTTTATGGTTCTGGAGAA AATATAAGAGTAATCAAGCTTAGTTATGTGTGTATTTTCTTTTAAAGATG GGGTTTGACCATGTTGCCCAGGTCGGACTCAGATGCTAGAGCTCAAGCGA TCCTTCAACCTCAACCTCTTGAGTAACAAGGATTCTAGTCACATTCCACT GTGACTGGCTGCATCCAATATGTGAACAGCAAGTATTAACAACGCGGTAT TAAGGATTATTACTTATTGACCACTATAGGGGGGGAACTGGCTTAAAGAAA AAACCATGGAGACCCATGACATGCAGGTGTAATTAATTGAATGCGACAAC GCGCGGGAGAGGGTCCTTGGGCGGTGTTAGAACTATTGATTCCTCGGGC TGGAGGAATTGATCTCAAACCTAATGGTTCCGGAAACCTATGGGGGGACC CGGACCCCACTTTTGGTCCTTTAAAAAAGGGTAATTGCCCCCTGGCCGAA ATATGGGCATACGGGTTCCCTGGGGAATGATATTCCATTGCAATTCCCCA CATTACACTCGGATC

>Sequence 2683

CCGGCAGGTACGCGGAAATGAAATTGGAGCTGGACCATTTAGTCAGTT CATTAAAGCAAAAACTCGGCCATTACCACCCTTGCCTCCTAGGCTAGAAT GTGCTGCTGCTGG

>Sequence 2684

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#### Table 3

TTCATTTACGTAGTCTTTCCTTGTTCTACGTGGTTTTAATTTTTTTGGACT GCCCCCATTGAGTTGTCCATTTGAGAACTTTCTTGCTTGTTAGATCCA >Sequence 2685

AGGACGCGGGAGCTACAACAGGCAGGCAGGGCAGCAAGATGGTGTTGC
AGACCCAGGTCTTCATTTCTCTGTTGCTCTGGATCTCTGGTGCCTACGGG
GACATTGTGATGACCCAGTCTCCAGACTCCCTGGCTGTCTCTCTGGGCGA
GAGGGCCACCATCAACTGCAAGTCCAGCCAGAGTGTTTTTTCCAGTTCCA
ACTATAAGAACTTCTTAGCTTGGTACCTGCCCG

>Sequence 2687

>Sequence 2688

AGGTACTTTGGCCTCTCTGGGATAGAAGTTATTCAGCAGGCACACAACAG AGGCAGTTCCAGATTTCAACTGCTCATCAGATGGCGGGAAGATGAAGACA GATGGTGCATCCACAGTTCGTGTGATCTCCAGCCTGGTCCCCTGGCCAAA AGTCCGAGGGATACTGCTACTCTGTTGACAGTAGTAAGTTGCAAAATCTT TAAGTTG

>Sequence 2689

AGGTACGCGGGGGTTGTATCAGGACTTATGGTGGCCACCAAATATGAAGT
GAGTGTCTATGCTCTTAAGGACACTTTGACAAGCACACCAGCTCATGGAG
TTGCCACCACTCTGGTGAATGCCTGCCCACCAAGAAGGGCTCGTGTGACA
GATGCTACTGAGACCACCATCACCATTAGTTGGAGAACCAAGACTGAGAC
CATCACTGGCTTCCAAATTGATGCCGTTTCAGCCACTGGCCTGACTACAA
TGCACAGAACCATCAAGCCATATGGTCCCAAGCTACACCATCACAGGTTT
ACAACCAGGCACTGACTACAAGATCTACCTGCTCCTGCCCG
>Sequence 2690

>Sequence 2691

AGGTACGCGGGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGTCTTT CCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTC AGAAGCATGTGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAAC TTAAAAATATATGAATACATGCGCAATACACAGCTACAGACACACATTCT

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# Table 3

GTTGACAAGGGAAAACCTTTAAAAGCATGTTTCTTTTCCCTCACCCCAAC
AGAAACATGCCAGTACCTGCCCCGGGCCGGCCGCTTCTAGAACCTAGGGG
AATCCCCCGGGGCTGCAAGGAATTTCGATAATCAAGGCTTATTCGATAAC
CGTTCGACCCTCGAGGGGGGGGACCCGGTAACCCAAGCTTTTTGTTTCCC
TTTTAGTTGAAGGGTTAAATTGCCGCGCCTTTTGGCGTAAATA
>Sequence 2692

>Sequence 2695

>Sequence 2696

CCGGGCAGGTACACCCTAGCTCCAGCTTCCCCTGGGAGACTGTGCATCTC CTGGCTCCACTAACACCACCTTCTTCTGACCTTCCAGCCTAGAGATGATG ACTCTGCCAGCCTAGATGGGCTCTGGGTTGTCTCCCTATTCCTGTTTGCT

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#### Table 3

>Sequence 2698

>Sequence 2699

GGGGCCATTGAGACTGCCATGGAAGACTTGAAAGGTCACGTAGCTGAGAC
TTCTGGAGAGACCATTCAAGGCTTCTGGCTCTTGACAAAGATAGACCACT
GGAACAATGAGAAGGAGAGAATTCTACTGGTCACAGACAAGACTCTCTTG
ATCTGCAAATACGACTTCATCATGCTGAGTTGTGTGCAGCTGCAGCGGAT
TCCTCTGAGCGCTGTCATCATCGCTGCCTGGGCAAGTTCACCTTCCCTG
GGATGTCCCTGGACAAGAGACAAGGAGAGGGCCTTAGGATCTACTGGGG
AGTCCCGAGAGACCAGTCTCTTCTCCCGCTGGAACCCATGGTCCACTGA
AGTTCCTTATGCTACTTTCACTGAGCATCCTATGAAATACACCAGTGAGA
AATTCCTTGAAATTTGCAAGTTGTCTGGGTTCATGTCTA
>Sequence 2700

>Sequence 2702

AGGTACGCGGGGAAGATGTGCGGGAGGCATATCGCCGTAGAGGCTGGGCC TTCAAGAAC

>Sequence 2703

GCCGGGATGCCAACAGATGGTGCGTGCCGGGGACCGCGTTAGCAGCAGCACCTCTTGAGAAACCAGGAAAAGAGCCCCGCGTACCT

>Sequence 2704

>Sequence 2705

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#### Table 3

TTAAAAATTTGAGTTCCATTTTAAATTTTGTAAATCAAGAACTGTGGCCC TAATTGTTCCCACTAAAAGAAATTTCCTTGGTTTAGGTCACCCACTCATT TTGTTCACAAAAGGTTTCCATATTTTTCAAGGGAAAGGTGCCAGGCCTTA ATTGGCCTTTATTTTTGTTT

>Sequence 2706

AGGTACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTACATTTGGGGGTAAA
GTGCAAGTTTGTTAAAAAGATATTGTGGAATGTTAAGGCTGGAGTACAAA
CAAATCCATCCAGGTAGTGAGCATAGCACACAAATTGGTAGTTTTTCA
ACCCTTTTTTTCTCCCCCCCCTCTCTCATGTTCCCCAGTGTCTATTGTTC
CCATCTATATGTACATGCATACTCAATGTTTAGTTCCCACTTATAAGTGA
GAACATGTGGTATTTAGTTTTATTCTTTTTTTATACTCAGTCCAGATTTTGT
GGCTCACAGGCTGGGTAGATAAAGACTTTTGTGTCCAAAATTTCCAACCAG
TAGCTGCTATACACACATATCTGGGCCTGCCGATTTTCCCATTTGCTTGT
TGAAGAATCGACTTTTATGAAAAAA

>Sequence 2707

GGGGCCATTGAGACTGCCATGGAAGACTTGAAAGGTCACGTAGCTGAGAC
TTCTGGAGAGACCATTCAAGGCTTCTGGCTCTTGACAAAGATAGACCACT
GGAACAATGAGAAGGAGAGAATTCTACTGGTCACAGACAAGACTCTCTTG
ATCTGCAAATACGACTTCATCATGCTGAGTTGTGTGCAGCTGCAGCGGGAT
TCCTCTGAGCGCTGTCTTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTG
GGATGTCCCTGGACAAGAGACAAGGAGAGGGCCTTAGGATCTACTGGGGG
AGTCCCGGAGGAGCAGTCTCTTCTGTCCCGCTGGAACCCATGGTCCACTGA
AGTTCCTTATGCTACTTTCACTGAGCATCCTATGAAATACACCAGTGAGA
AATTCCTTGAAATTTGCAAGTTGA

>Sequence 2708

CCACGGCTCATAGCCTGTGGGTTGGTGCTGATCGGCATGTTCGTGATGAA
ACTCTAACCGTCGGACAAAACTAAAAAAGGAATGGGTTATGACAGTCGCT
TTCTGGTGTGTTGATCGCTATTTTTCTGCCGTATCTGTGCACGGGCGT
GGCCAAGTTCAGCGGTGGCAAGTTCGGGCCCCGGCAGAACCATGACCCCC
GAGCTTTCCTGGAAACCCTCGAGGGGTTCGCCAAGCGTGCCCACAGTGCG
CAACTCAACAGCTTTGAAGTGACCCCGGCCTTCGCGGCGGCGGTGATCAT
TGCCCATTTGGCCGGCTGCTCGCTGGTGACGATCAACGTATTGGCGG
TGCTGTTTATTACCAGCCGGCTGCTTTACATCATCTGCTACCTGGCGGAC
TGGGCGATTCTGCGGTCGGTGGTATGGCGGTACAC
>Sequence 2710

>Sequence 2711

CCGGGCAGGTACCCATCTAAACCCCAAACCTCGGTCTCCAGAAGCAGATG

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#### Table 3

>Sequence 2712

>Sequence 2713

AGGTACTITTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGCAGCTAAAATCTAGGATG
GTGTTAAGTTTCTCATTTTGTCAATTATATATAAAAAAATTAGAAACAAC
ACGAATCTGCATTTCTTGGATGAGGTAGTTAATAACAAACTATTTCTCAA
TATTTGTATACTAAAAACTAGTGAAGGTGTTATGTGTTTCAGTATCTTAT
CTCTTATTTGAACATGGGTTTCTGAAAGGAGCCCTATATAATAATATAAAT
GGTATGTAGTAAATGAGGCACTGTCTTGGCTGGGACTGCTATAAAAAAAT
TACCATAGGACCATTGACTAAACCACAAACATATACTTCTCACAG

>Sequence 2716

>Sequence 2717

AGGTACTTTTTTTTTTTTTTTTTTTTTTTTTTGAGTTCCAGGATACAGGTGC AGAGTGTGGAGGTTTGTTACATAAGTAGATGTGGCCATGGTCGTTTGTT GCACCTATCAACCCATTATCTAGGTTTTAAGCCCCATATATGTTAGCTAT TTGTCCTAATGCCTTCTTTCCCCTCACCCACCAACCGCCCTCAAGTCAGT

> Page 562 of 685 of Table 3

## Table 3

TTTCTAAGAGTATTAATCAAGAAACCATCTCATAATCACACCAAAGCATA
TTTCTACACAAGATATAAAATACTAGGATATTTGCTAAAGATAAATGCAT
GCCATACACTGTAACAATGGAAATGACTTCCTACAGGATAACAATGCTAA
AATTAAACTCTTTGTAATTAGTAAAGATGAACATGTGGGGAATATATTGG
ATATATTTTTTAAACTATTTTTTTGTCCTCAGTAAAG

>Sequence 2718

TCCTATGGATGCTTTAAGGCAGTGTTTCTCAACCAGAGACAAGCTTGCCA CCCACTGAATATTTGTCAGTGTCCAAAAATGTTTTTGGTTGTCATGACTG GAGGTGGGAGGAGTGTGCTATTGACATCTAGTGGCTAGAGGGCAGGTATG CTGCTAAATATCCTAACACACAGGACGGCCCCTCTGCAACAAAGAACTAC CTGACCCAAAATGTCAGTTGTGCCAAGGTTGAGACACCCTGCTGTAGGGG ATAGAAAGAAGTGTAAGAAATGGTTTCAAACTCAAGAACAATGATTAGAG AGATGGATGGATAGATAGGTACCTGCCCG

>Sequence 2719

>Sequence 2720

>Sequence 2721

CCGGGCAGGTACTCTGTGTTTTCAAACTCATGCCTTATACACTTTTATAC
TGGCTTTTATCGATCATTTGGTAGAAAACATCTTTCAGGTTTTCCATATC
CTTGACTTTGAACACATGTTTGCTCATTGGGTTTCTTGGAAGCCAAAGCA
TTGATGTTCACTTGGTTCACCAAAGGCCCGACCCCAAACACATAGACATC
CAGAAATCCTCCCTTGGGTTTTTGCGATCCTTGCCAATGTATAGCACGTC
CCGGATCTCATCAATGCCCGCGTACCTGCCCG

>Sequence 2723

AGGTACATCATATTTGCTTGTTGGCTTTATGATAACTTAGAAATAATATT CTGGATTAACTGTGTGACTCATGAGAGAGTTTGTGCAACTATGTTTCCAA ATTTACTTGATTTTCAAGACTTACACTAGAACTGTGCGAACAAGGTAATA

> Page 563 of 685 of Table 3

## Table 3

AGTAAGCATATGTATTAATACAACCTTTGGTCAACTCTTGGGTAGCCCCA GTGTTGGCCTCCGCTTTGGCCTCCCAAAGTGCTGGGATTACAGGCATGA GCCACCGCAGCCAACATAGAGATAATCTTAAAGACTCCNNANTAAA AAAAAAAAAAAAAAAAAAGTACCTGCCCG

>Sequence 2724

>Sequence 2725

TTTTTTTTTTTTAAAAAAAAAAAAAGGGGTTTTTTTTTCAAACCCC ACCCCTTTATTTTTGAAAAAGTGGGGGAAAAAAAATCCTTTTGCCCAAAC GCCCTTAAAAAAAGAGGGGAAAACCTTTCTATTTCTGGGGGGGACCACCA CCCCCTTTTTTCTTTACTAAAAAAATGGGGGAGAATGACCCTCTCTGT ATACCAAAAAAAACCCCAGCCCCTCCCCCGTGGACCTGGGTAAGTTTAA AAAAAAAGGAGCCCCCGGGGGGGGGAGGAATTCATTTTTAGGCTTTTTCTA CCCCCACCGGGGGGGGGGGGCCCCCACCCAATTTTTTGTTCACTTAGA GGAGGGGTACTACCCGCCCCTGACTAAAACAGGACTTATTGTTCTTCGG AGGAAAAATTTTTACTCCGATAACAACACCACACAAAATAGTACTCGAGC AATAAAATGTATAAAGCCCGTGGGTCCTTAATGAGGAACCCTACTCTCCT TTTTTGGGTCGTGCCCCCTTCCCCCTTTTAAAAAAGAGAAACCCTCGCGC CACCTTTTATTAAAAGATCCCACCACCGCGGGGAGAGAGGCGCGTGCAG GTAATGGGATCCTTTTCCAATTACGAAAAACAAGTAAGAAGGACTTGGAC

>Sequence 2726

>Sequence 2727

AGGTACTTINTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTCCGAAAGGAAGCAAAAC
CTGGGGGGTTAATTAATCCTTCTTGATGCTGGGCAGCAGTAATAGGATCA
AGAAGAAAGCCTTTCTCCTCCTGTGCTCCCAAGGATGCCCAGCGGGAGAC
TGTGAGGAGATGGAACACAGCCTTCACTCTGTTAATTGTTCAAGAGCAAA
TCACCTGCCGTGAGGACCATGACAATCCTGGGGGCCATTTGTAGAATATT
CATCCCCAGACTCTGAACTGAGTCTTGAAGTCTGAGTAAGAATTTGCTGG
GTGAAAAAAAGGGTAACGTTCTTTCAAAAGGGAGAGAACCAGCTTAAACA
AGGGTCCCGGGGGGCAGAACATCATGATAGGAGTAGGAATGCAGGTGAGG
TTTTGGTTTTCTGCAAAATATTGGTACCTGCCCG

>Sequence 2728

> Page 564 of 685 of Table 3

## Table 3

>Sequence 2729

TGGGAATGCGCCCGCGTATACACTAATATTTAGGGCGAATTGGACGTCTA
CACCGGGGGGGCGGCCGGCCAGGTACTGTCATGCAAGGATGGGAAC
ACATTCTGGGAAATGTGTCGTTAGGCAATTTTGTTGAGAGAACATTATGG
AGTGCATTACATGGACCCAGATAGTAGAGCCTACTACATACCTAGGCTG
TATGGCATAGCCTGTTGCTCCCAGGATACAAACCTGCATAGCATGTTACT
ATACTGAGTACTCTTTGGAAGCAGCTGGACTTGGCTTGATCGTAGGAGAA
TCCGGTGTCCAGGTCGCTGGCAGACTTCTACATGTTTTCTACATACTG
GAACGCCTTCACCAAGCGGAGGGATTCTTCCACGCTTCAGCCCACTGGGA
AGACTCTTAAATGCTTGATGACTCCATTGGGGTCAATTATGAAG
AGACCTCTTAGTGCAAGACCAGAACCTTCTAACAGCACACC
>Sequence 2731

GCCGGGGACCTTGGCCTTCGAAAAAACCAGCTTTGACACAAACTAAAAGC
ATCACCTGCTCAACTCTCAATATTGCTTTATCAGCATCTTTTCTCTGTAG
CTCCAGGGGAATCTTTTCTCTAAAACATTTATGCCCTTGCTTTGGCTAGA
AACACATTAACTGGTTTACTCATTGAGAATCCAGCATATTTAAGAGGTGA
CCCTGTGTTTTTTGTGATATTGAGGCATTCATACAGAGCTGCAGTTAGAC
GGGGTTACGGGGGCTAAAAGCAGAAAAAAAATTCCATTTCATCGGGATGG
AACTGAAGGATTTTATTCTATAAAGCGGCCCTGGTTGAATCTGGCAATTC
TTTTTGCCAAGATCCCTAGCAGAAGATTTAGCCATGTCCTTCCCCTCACT
TGTGTGAGTGGCCCCTTCTGAATCTCT

>Sequence 2733

> Page 565 of 685 of Table 3

# Table 3

>Sequence 2734

GCCGGCCAGGACCCGGACCAACTAGGAGGAACCCGGAAGGATGGCCTGCA CCTGTGGAGGAGGGTTTCAAAGGAAAAAGGTCGGAAACCAAAGGCCTGAA AAGCCAAAGGCAGGTGGAGAGAGGGTGGAAAGTGAGCAGCGGGCTGGGCT GGAGCCGCACACGCTCTCCCCCATGTTAAA

>Sequence 2735

AGGTACGCGGGGCAGTGGGAAGCTCGCAGCAGCTGGGGAGGAGCCAAAG CCTCGGCGCTCACCTAAGCCGCAGGGAGATACACCCAACTGGGAGATGAG GAAACAGCAACCCAGAGAGGAGAACTAACCCACACAGGATCATTTCGCGA AAGAGCAATGCTTGAAAAACCAGACCTGGACTTTTTTAGGACAAACTTAC TGCAGCTTGAAGGAGCCAACCATGGATTTGAGGCGTGTGAAGGAATATTT CTCCTGGCTCTACTATCAATACCAAATCATTAGCTGCTGTGCTGTTTTTAG AGCCCTGGGGGCGATCTATGCTTAACACCATGTTACTAACCATTATTGCT ATGGTGGTATACACTGCCTATGTCTTTATTCCAATCCACATTCCCCTGGC TTGGGAATTTT

>Sequence 2736

>Sequence 2737

>Sequence 2739

>Sequence 2740

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# Table 3

TGGAGGCCATGGGGTTGGCTTGAAACCAACTTTGGGGGGTTCGATTCCTT
CCTTTTTTGTCTAAATTTTATGTATACGGGTTCTTCCAATGTGTGGTAGG
GTGGGGGGCATTCATTTAACCACTTCAAGGTTAATGGGGGGGCCTTCTAC
TTTTAGGACTTTTCGCTTTGAATCAAAGGCTTCTCAAGTCGTGAAAATAA
TTAATATTACTGCTGTTAAAGAAATGAATGAACATCCCGCGTCCCTT
>Sequence 2741

>Sequence 2742

>Sequence 2743

>Sequence 2744

CCGGGCAGGTACACGGGGGCTGTTGGTGGCGGCGGAGACAGCTGTGAAGT GTGAGGTTCTTTGTCTGCTGGCAGCTAGGGCGACGAGGCGGGACGTCAT GGAAGTGAAGGATGCCAATTCTGCGCTTCTCAGAAACTACGAGGTATTTT AGTTACTAAACTGATCTTGAAAGAGCCACTTTTAAGAAAGTGGGAAGGAT TTTCCACCGTGTCTGGGCAACCAGAACTTGGAACACTATTCACCTATGAA AACGTTAAAAATACATTATGACAATACACCAATGGCGAGGCCCCAGCAGA ACCTTGAAAATTGTCAAAAGAGATTTTCTCAACAAGCCATTGAAGAAGGC CACAAAGTTTGGACTCAACAGCATTGTAGAGAGATTTTAGCCTGGCTGTA AACCACCCGGGGCCTTGTCACCTGGCTTGTGGGAAGAATCCCAACTTGAA TGGTTGCGAAGAATAGGAGGAAAT

Sequence 2745

> Page 567 of 685 of Table 3

## Table 3

>Sequence 2746

>Sequence 2747

>Sequence 2748

>Sequence 2749

CTACTATCTTAGCGACTAGTGCCCTCTACATCCATGCTGCAGCCGACGTC CTTGTGCCAGATCTCACTACAGAATTATAGCTAACCCTGTGACTCGTCAG CCTGTCAAGCGCAGCTGTAGAGCTCATTTAGTTCTCTCAGTGTACAATGG AGAGGCTGTATCTCCCAGAGAAGTCATGCAGAGAGATGAGGGTGGAGTCA GGACCAAATTTCAGGCCCAGACTCCTGGCTACCAGCATGTGCCAAAGTAC CTGCCCG

>Sequence 2751

CCGGCCAGGTACATGTATAAAATCCAGCACCGAAGAGCCATGGCTCACTG CTAATCACATAACACACACAGGAGTCTATTTATGCATGGAATGTGGCATA TTTTTTAACAAGAAGTCACAACTTGTTATACACCAGAGAACTCATACAGG AGAGAAGCCCTATCAATGCAGTGAGTGGGAAAAGCCTTTTCACAGAAGT

> Page 568 of 685 of Table 3

#### Table 3

CACTGCTCACGGTTCATCAAAGAACGCACTCAGGAGAAAAACCGCATGGG TGCAGCGAATGTCAGAAAGCTTTTAGTAGGAAGTCACTCCGCATTTTACA TCAGAGAATTCATACTGGAGAGAGCCGT >Sequence 2752

>Sequence 2753

>Sequence 2754

>Sequence 2755

CCGGGCCGGTACGCGGATCGGCGCATATGGGCATCGCCATTGCCGTGGG CATGATATTTGGCATGATCTTCAGTATGATCTTGTGCTGTGCTATCCGCA GGAACCGCGAGATGGTCTAGAGTCAGCTTACATCCCTGAGCAGGAAAGTT TACCCATGAAGATTGGTGGGATTTTTTGTTCGTGAGCTTAGGTTTGCTAG ATGTTTGTTGTGCGACTGTTTGCCAATAATGTTAGTATTCATATTGTATT GACTCGATGACTCATGAGGGTACACACTGGAATGTCTCCTTAATGCGTTC ATTCAATATTGACATTTGATGATGAGCGCGGGGTCTGCCTGACGGTTGCC ACTATATCTCCAATCTTGGAGTGCACACCATTGTCATGTCACCATCTAGA >Sequence 2756

AGGTACTGCCGCCCGGGCAGGTACGCGGTGGTAGGACGTGAAAGAAGAA CAAGCTGTGCTAAGACGAAGCCTTCTGAGACAGAGATGACGGCCTCCTAC GTTACTCGTAAGATACTATACGAGAACCTCCTTTGCCAGGAACTATTTAT AAACATACTGCAGGAAAATGGTAGCTGAGACCAATGA

>Sequence 2757

AGGTACTCCGTCATCATCTCCCTAGACAGTGACCAAACTACATGCAAATA AATTTGAAAACCGGAAAAATTTAGAACACAGTAAGCAGAATAAGCATGTA GATACCAGGGACAAGACAGTAGTTACTTACACTGTGAACTCCTAAAGCTT TCCAGACTGCGAAGCTAATCACACCCACACCCATGCATACAGGGAG

Page 569 of 685 of Table 3

#### Table 3

CCCCAGCCCAGAGCTCGCAAGGCAAGGGAAGACCCGCTTTCCGGTAATGC AGCCGTGGCCATACTTCCCTTATTGAACCATTCAGGGCTTTTCTTTTTAG CCAATGATAATGTTGTAATAAATCCAGCTAGCATTCCCGCTGCAGCAACG GTACCTGCCCG

>Sequence 2758

AGGTACTTTTTTTTTTTTTTTTTTTTTTTTGGGTGTTTGACTTCTGAT AACTTCTAAGTCTTACTCCTCTGTATGTCTTTTGTTCCACATCTGAGCAA GCTAATAAGAAAGCCTGGGTGCTTTCTGCTTTGGTGCTTACAGGAGATCC AAACCATACAACCCTCTGCTTGCACACAGGAACTCTCACCTCAATCTCAC TTTCTAACCACAAGCAAAACCCAAAGGCAGTCTCCTTTCCTTTCTCCCAT AAACCATTGCGGACCTACTTGGGAGGCCTGCACCCCATTGTCCACAAAAA CTTGAATTCTGTAAGTAATAATTTTTTAAGCTCTTTCGGAGTGGGTTTCA CATCCTCAGTCTCAACATCTGAATTAAATATTGACTGAGAGTGAATCCTG CACCTTCAGAATGCTACAAAATGCTCTCTTAGAGGTTGTGTGTCTCT GCTTACATAACTATCTGTTATTGAATGTTGACTACTTTTTTTCATGAATT CTTAACATCTTAATTATTTAAAAAAAAATCCTTTGTTAATTCAACAATTGG CTCTTTCCTTAGAATGATGGATTTGGCTGCTTACTGGGGCTTTAAAAACT TTTTTGGGCCCTTAAAAAGTCTATAAATTTGGGTTAAAGTCCAATTTGTT CGGCGGAGTTTGCCTTATTCAAAGTTGGTATATTTTAAATCACTTTATCT TTAATTCCCAATTACTTCCAGATGGCTTTTTAAATTTGTGTACCCTCGCT TTATTAATTATTGACATCTTTTATATCTTCACACATGA

>Sequence 2759

>Sequence 2760

AGGTACTCTTTTTTTTTTTTTTTTTTTAATCAGACAGGGTCTTGCTC TGTTGCCCAGGCTGGAGTGCAGTGGTGCGATCTCGGCTCACTGCAACTTC AGCCTCCTGGATTCAGGCAACACTCCTGCCTCAGCCTCCCACGTGGCTGG GATTACAGGTGCCTGCCCCCATGGCTAATTTTTTGTATTTTTTGTAGAGA TGGGGTTTCACCATGTTGGCTGGGCTGGTCTCACTCTCCTGACCTCAAGC AATCTGCCTGTCTCAGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCA CCGCCCCAGCCTGAGCCTTTTTTTTTTTTCTAATGCATCCAAGGTTAAGGG GAAGACGCAAATAACAGGACTACTCTAAAAGGAAACCTGTTTGAACTCTG TGAGATCAGTCATCAGTATTCCACAGGCACACCTTAATTTCATT GTAAAAAGATATATATTTTGGCTATTTTTGTGCTTTTTGGGGGCCCTAT TTGTGCTTTTTTACCTTATGTAGAGATCTTTATACAAAGTGATTTTTTAC ATTAAAAAAGAGACTGGAAATAAATTGTATAGTTACTTAACTAAATGAAG ACATTTCAAAACTTTGTGGATGGATTTAATCTTGAAGTAGTAAGTGGGAT AGTCATAAAACCATTCATCCCCTCTTGATTTATACTAAATTTTTGGCTTT AAGGCACATTCTGGAGGTAATGCATTCTTTTTATTTGGAAACATTAACTA TTACCCGTGGTTTTTTGAGAAACCTTTAATTTGCCCGGGGTAAGGGTTGG CGTTCCTTTGGTTGGTTTAAAGCCCATTCTTTTATGCCGGATGCAATAAT

>Sequence 2761

CCGGGCAGGTACCTTGAAATCAGATAATCTCGACATCCAGAAATAGCCTT TGATTTGTTCTTTCTCGATGTCTTGTGTCCTTGGGATCAAAGCCTCTTT CACTGGCACCAAATAATGCCCAGTGAGGAGTTCTGGCCATATAATCCTTT GCGCTGAACGTTTTTGATCCACCACTATCTTCATATTCCTGGATGAGCTC CTGGAAGCGGTTATAATCGATCCATGTCCACCATTCACCACCAATTTTAA ACTTTCTGTGTGCTATCAGGAGGCAA

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#### Table 3

>Sequence 2762

>Sequence 2763

TGAAAGCGC

>Sequence 2764

>Sequence 2765

>Sequence 2766

AGGTACTCTGACATCATCTGACATGGCAGCTCCCCAGCCATGGTGGTGGT
GATAGAAATATAAATGGTGACAGCAGCAGCAGCAGTGTGATAGTCACGGTGGA
GGGAGATTGCTTTTCTGCAGCCATGCTTCTGGCATCTCCCAACCTGGGTG
GGACCCAGCTGAAGATCTGCAGAGAAACCAGCCATTTCTGAGAGCAAGGC
AATCAGTGGGCATTTACTGGAGGGTGTCTAGGTTCTTAACATCTCACTGT
TATTTGGGCTCATGGGATCATAAGAATGACAAAATAAAGGAAAGTCCTCA
TTTCTGACCACAAGAAGCTTGACACAAATTCCAGTAAGTCTTGGATTGAAA
GGAGAGACATGTTTTCATGTGTTTATATTCCCTTAACAACCAATATACCT
TGACATTGAAGAGCCAAGATGTGAGTGGGAGGTAGTGCTATGGTTTGTAT
GCATTTCCCAAAGTTTATGTGTTGGAAACTTAATCCTCAATGCAATGGTG
TTGAGAGGGTGGGACTTTTAAAAAAGTGATTAGGTTATAGGGCTCTGCACT
TATAATGGATTAATGCTGTTACATGGGAGATCATGGGAATCGTA
ATAAAAAGGATGAGCTTGAAAAAANAAAANNNANANATNTGTTCCTGCCCC
GGCCGT

>Sequence 2767

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# Table 3

>Sequence 2768

>Sequence 2769

>Sequence 2770

AGGTACTGAGTCAAGGACGTCTTTAACGTCATGGGCGGCTCCTTTACCCA CGCTTTCTAGATCTTCGACTGCATCTTTTCCTAGTTTTCCGAGTCCCCCC ACAGCTTTTTTTGCTCCGTCTAGGCCTTTTTCCAGAAGGCTGGATCTCTG CTTCCTTGGCTTTGGTGCCTGTCTGGCTAACCCTGGGTCTTCACCTGCAT TTTCCTTTTGAGCTGCTGATGCTTCATGGCAAGGGTTCCCCGATCCTGTC GAGCGCCCCCGGCAGGTACGCGGGCACAGCGGCTTCCTTGATCCTT GCCACCGCGACTGAACACCGACAACAGCAGCCTCACCATGAAGTTGCTG ATGGTCCTCATGCTGGCGGCCCTCTCCCAGCACTGCTACGCAGGCTCTGG CTAAGACTGAATACAAAGAACTTCTTCAAGAGTTCATAGACGACAATGCC ACTACAAATGCCATAGATGAATTGAAGGAATGTTTTCTTAACCAAACGGA TGAAACTCTGAGCAATGTTGAGGTGTTTATGCAATTAATATATGACAGCA GTCTTTGTGATTTATTTTAACTTTCTGCAAGACCTTTGGCTCACAGAACT GTAGGGTATGGTGAGAAACCAGCTACGGATTGCTGCAAACCACACCTTCT CTTTCTTATGTCTNTTTACTACAAACTACAAGACAATTGTTGAAACCTGC AAAGTACCTCGGCCGCTTTN

>Sequence 2771

CCGGGCAGGTACTTTGCCTACGGCAGCAACCTGCTGACAGAGAGGATCCA CCTCCGAAACCCCTCGGCGGCGTTCTTCTGTGTGGCCCGCCTGCAGGATT TTAAGCTTGACTTTGGCAATTCCCAAGGCAAAACAAATCAAACTTGGCAT

> Page 572 of 685 of Table 3

## Table 3

>Sequence 2772

AGGTACCAAAAAGACTCTCAAAAACCAATACTCCCACGGGCAAGGGAATA
GCCAAGTTTGTTGCGGTTTCCAATGAATGACATCAGCCTTGTAGGTCT
CAATCAAAATGGGTTCAGTTAACACCATCAGTTTCTTTCCTCTTCCAGAT
CCAGTTGAATTCTTGTGGGCATTCTGGATAGCTGGAACAAGCTTAGACAT
GAACCCAGACAACTTGCAAATTTCAAGGAATTTCTACTGGTGTATTTCA
TAGGATGCTCAGTGAAAGTAGCATAAGGAACTTCAGTGGACCATGGGTTC
CAGCGGGACAGAAGAGACTGCTCCTCCGGACTCCCCCAGTAGATCCTAAG
GCCTTCTCCTTGTCTCTTGTCCAGGGACATCCCAGGGAAGGTGAACTTGC
CCAGGCAGATGCGATAGACACGCGCTCAGAGGAATCCGTGCAGCTGCACA
CAACTCAGCATGATGAAGTCGTATTTGCAGATCAAGAAGTCTTGTCTGT
GACCAGTAGAATTCTCCCTTCTCATTGTTCCAGGGGTCTATCTTTTGTCA
AGAGCCAGAAGCCTTGAATGGTCTCCCAGAGAGTCTCCAGCTGACCT
TTCAAGTCTTCCATGGCAGTCTCAATGGCCCC

>Sequence 2773

>Sequence 2774

>Sequence 2775

AGGTACTTTTTTTTTTTTTTTTTTTTTTAATCGGCAAAGCCTTTTGACCA
AGTTTCCAAACTGGTTGGAAG

>Sequence 2776

>Sequence 2777

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# Table 3

>Sequence 2778

>Sequence 2780

>Sequence 2782

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## Table 3

>Sequence 2783
AGGACGCGGGGAGCAGACATGGGAGTGCCAAGGTGGCCAGATGGTTCCA
GGACTACAATGTCTTTATTTTTAACTGTTTGCCACTGCTGCCCTCACCCC
TGCCCGGCTCTGGAGTACCTGCCCG

>Sequence 2784

AGGTACTTCTGCCTGGGTTATGGGAGTAAAATCTTGTCCAGGGACATCCC
AGGGAAGGAGAACTTGCCCAGGCAGATGCGATAGACAGCGCTCAGAGGAA
TCCGCTGCAGCTGCACACACACGTCATATGATGAAGTCGTATTTGCAAATG
AAGAGAGTCTTGTCTGCGACCAGTAGAATTCTTTCCTTCTGATTGGTCCA
GTGGTGTATCTTTGTCAAGAGCCAGAAGCCTTGAATGGTCTTTTCAGAAG
TCTGAGCTACGTGACCTTTCAAGTGTTCCATGGCACCCTCAATGGCCCCA
>Sequence 2786

>Sequence 2787

CCGGGCAGGTACGCGGGGACCCTAGATCCCAAGATCTCCAAGGATTTGGT GGCATACCCACTCCAGCACACAGAAGCATGAGGTTCATGAACTCTCCTCT TCCTGACAGCTCTGGCAGGAGCCCTGTCTGTGCCTATGATCCAGAGGCCG CCTAAGCCCCAGGATCGGGGAACCCTTGCCATGAAGCATCAGCAGCTCAA AAGGAAAATGCAGGTGAAGACCCAGGGTTAGCCAGACAGGCACCAAAGCC AAGGAAGCAGAGATCCAGCCTTCTGGAAAAAGGCCTAGACGGAGCAAAAA AAGCTGTGGGGGGACTCGGAAAACTAGGAAAAGATGCAGTCGAAGATCTA GAAAGCGTGGGTAAAGGAGCCGTNCATGACGTTAAAAGACGTCCTTGACT CAGTACCT

>Sequence 2788

> Page 575 of 685 of Table 3

# Table 3

AAGGACTTTCCGCTGCGAAGCCAAGGCTTCTCAAATCATGAAAAGTATTA ATATTACCGCTGTTAGAGAAATGAATGAGCCTCCAGATGATAGGATGTTT CATGTGGTGTATGCATCGGGGTAGTCCCAGAAACGAAGGGGCATCCCGGA TAGGCCGAGAAAGTGTTGTGGGAAGAAAGTACCATTTACCCCGATGAATA TGATAGCGAAATGCGATTTGGCGCACGTTTGGTCTA

>Sequence 2789

>Sequence 2790

AGGTACTTACACTGAAAACTTCAAGCAAGTAGCACCAGGGCTCCCCCTAA
GCATAACAGGGGCCTGATTAGCACCCCAGAAGAACCCCTCAAAAAGTATA
TAAATTTATTGCGTCCTAGCAAAGATCTGCAGCTTCCAGTATTCACACAA
TGTGAAGATATTAACAATACAAAAATATATTTTGAAAGTCAAACACCTGTA
GTTCATAGTGCTTTTTTTAGATTTGTTAAAAAAAATACAATGCTTAGTTTC
CTATATAGGATATACAAAAGCAAAAAATACATATGTATATAGTAGAAATA
AATCAGCCATAGTAATTTACAGCTTTTGTCTCCAACCCTCCCCTAATCAT
AATCTTTATCCCACACTTCAGTATATACTTTCTGGGATCAAAGGATCAAT
TTATTCTGAACCAGGC

>Sequence 2791

AGGTACAAGGACTGCATCGAGTCCACTGGAGACTATTTTCTTCTCTGTGA CGCCGAGGGGCCATGGGGCATCATTCTGGAGTCCCTGGCCATACTTGGCA TCGTGGTCACAATTCTGCTACTCTTAGCATTTCTCTTCCTCATGCGAAAG ATCCAAGACTGCAGCCAGTGGAATGTCCTCCCCACCAGCTCCTCTTCCT CCTGAGTGTCCTGGGGCTCTTCGGACTCGCTTTTGCCTTCATCATCAGAGC TCAATCAACAAACTGCCCCCGTACCTGCCCG

>Sequence 2792

>Sequence 2793

>Sequence 2794

AGGTACTCTGCTCAAAATGGCTGGTGCTACTGGTGCACTAAGTTGTGAGG AATTACCTCTGCTCGGGACAGAATAAAAAATCCTAGGCCTCAAGGAAAAA CTGGTGGCATCCTTCTGGGTCTTTTCAAGTCCTTGCATCTAAAAATCAAT CTTGACAAAAATAAAACAAAAAGCCACAACAAAAGAAAGCCAAACCAATC

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#### Table 3

>Sequence 2795

CCGGGCAGGTACTCACTGCTGCAGGCAGCCCTGCTCTGCGTCAACGCCAT CGCAGTGCTGCACGAGGAGCGATTCCTCAAGAACATTGGCTGGGGAACAG ACCAGGGAATTGGTGGATTTGGAGAAAGCCGGGAATTAAATCACAGCTAA TGAACCTTATTCGATCTGTAAGAACCGTGATGAGAGTGCCATTGATAATA GTAAACTCAATTGCAATTGTGTTACTTTTATTATTTGGATGAATATCAGT GGAGAAAATGGAGACTCAGAAGAGGACATGCCAGTAGAAGTTATTACTTT GGTCATTATTGGAATATTTATATCTTAGCTGGCTGACCTTGCACTTGTCA AAAATGTAAAGCTGAAAATAAAACCAGGGTTTCTATTTATCTGTTTTTTT TTAATGTTGCACTTGGTAGTTCATTTACAAAGATCAGATCATGGAAGGCA GTTACTCTTCCGGACTGGATATCTGGATGGCTCAAGGTAATAGTAGTTCA TGCTGGGTGAGAATGGTAAAAGGGTGCAGACTGTGGCTTCTCTTTTTTAA AAAATTTCTATCTCTACCTTTCAGGGATGAAATTCTTTTCAAAATTTGA AGTTCCTGGGACCTACCCCTGAGGGGAGGGTTATCCCTAATAAATTAAAA GGATTTTAAAAATAATTCCGCCCCAAAAAGATAAAGGGAAATTAAAAATT TTTTTTAGACCCGGGTAAAAAATTGGCCAAGGGCCGCCCTTAATTCAAAT TTTCCCTCCTTTGGGGGTGAAA

>Sequence 2796

TCCTGGATAACTGGAATCCTGGCCCTCGGCTTTTCGTTGTGGGAAGCCGT TTTATCTTCTCTTAAGAGGGGGATACAGGTTTTTCACAAAATTAGGGGAA TACCCCGAAAAAAATTGTTGACAAAAGGCCCCAAAGGGCCGAAACCTAA AAAGGCCCTTGTTTGGGTTTTATATAGGGCCCCCCCCTGCAGAGTATAAA AAATAACCCTAGTTAAGG

>Sequence 2797

>Sequence 2798

>Sequence 2799

GGGAACTCATCTTCTAACTTCTTCTTGAGCTGAAGATACTTGGACTTGTA

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## Table 3

GCCTCAAGCGCCACAATAAACGACTCGGACGCGAGAGCCATGGCTCGGG GCTGCCACATCCGCTGAGGAGCGGACGCCCGGGCCACACTCCCCGCGTAC CT

>Sequence 2800

>Sequence 2801

TTCCANNGTCGGGAAANACCTTGTCCGTGCCAAGCTTTGCATTTTAATGA AATTCCGGCCAAACCGCGCCGGNNNGGAAGAAGGCGNNGTTTGGCCGTAT TTTGGGGCCGCCTTCTTTCCGGCTTTCCTTCGGCTTCACTTGAACTTCG GCTTGCGGCCTCGGGGTCGTTTTCGGCCTGCCGG

>Sequence 2803

AGGTACGCGGGACTGCTAGGGGCTTAAGCGGAGGGAGTCGAGCCAGCGT CGCCGCGATGGTGTTGTTGGAGAGCGAGCAGTTCCTGACGGAGCTGACCA GACTTTTCCAGAAGTGCCGGACGTCGGGCAGCGTCTATATCACCTTGAAG AAGTATGACGGTCGAACCAAACCCATTCCAAAGAAAGGTACCTGCCCG >Sequence 2804

>Sequence 2805

CCGGGCAGGTACGCGGGGGGGGTTGTGGAGTGGATGCTTTGGCAAGATGG CGGGGAGCGGCGCCCAAGTTACTTCTACCGCCAGCACCTTCGTGAAG CCCATTTTCAGTCGGGACATGAACGAGGCCAAGCGGAGGGTGCGCGAGCT CTACCGCGCCTGGTATCGGGAGGGGCCGAACACTGTGCACCAATTCCAGC TGGACATCACTGTGAAAATGGGACGGGATAAAGTCCGAGAAATGTTTATG AAGAATGCCCATGTCACAGACCCCAGGGTGGTTGATCTTCTGGTCATTAA GGGAAAGATCGAACTGGAAGAACAATTAAAGTATGGAAGCAGCGGACAC ATGTTATGCGGTTCTTCCATGAAACAGAAGCGCCAAAGGCCAAAGGATTTC

>Sequence 2806

TGGGGAGCGAATCCACGTCTCATCT

>Sequence 2807

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#### Table 3

>Sequence 2808

TGGTAGGTAAGCATCTGCAGCTCATCTGGAATACTACAGTCTTGAGGACG
TGCTTTCCATACGCCCTGTGTCTGGTCTACATGCAGGCGTGTCTTGTGAT
AAATCCTGTTACGGGCATGTGTGTGTGAGGGCCTCCATTTTGGTCCCCCCA
CTCCATTTTATTAGAGTTTGGCATAAGTGACTCCATTTTGGTTCCAGCAA
CTTTCACATAAGGAAACTGAGGCTCAGAGAAGTCAAGGGACTTGCCCCCA
GGTCCCACTAACACTGTGCAGTGGAGTGATGCAAACCCCAGTTTTCCCAG
TGGATGGAGCTGCTGTGGGTGAGTGCAGGGTGCGGTTGAACCAGAGGGG
TGGTGCAGAGACCAGTGTGGGATTGAGAGCCCGCGTACCTCGGCCGCT
>Sequence 2809

AGGTACTTTTTTTTTTTTTTTTTTTTTTTCAATGTTGTTCTAGACTT
CTATGTAGTTTTAAGACTGCTAATATGTATTTAATTTCCAGGTTTTTTTA
GTTTTCTATTTCTTTTCACATAACGTTTCTTCTTGCTTCAGTCATATAAT
ATCCTGTGTATCTGAATATTAATCTTTATTTTGTTTTAGAACATTTTTT
TTTCTATACCCAGATGAAAGAGGTTTGATTGATTTGGGAAGTTTTCCGTG
GCACAGTGATATACCATGAGCCTTGNTTTTATAAAAAAAAGCAAACAGTGA
GTGTTATTTAGGGGTGTACGCTTTTTTCTCTTTTTTGGAAGTTAATTTAAA
CATCACCTTACAGAAAATGGTATTCATTCTTAGGTGTTTCCTTTCTTAGA
AAAGGGGTCTTTAGGAACTTGGGCTTTGGCACCCAGCCCATTAGGAAAAG
TCAAACTTTAGAGG

>Sequence 2810

AGGTACAGCTTTACATTCTATAAACTTGAATTTCAAACTTCAACACCCCT CACTAATCAGCCATCCGAAGAAAGGATATTGAACATAAGCAAATCCTCTT GGACGGCGAGTGTAGAAATCAAGTGGAACATACACATCAACTATAGGACC ATAACGACCAAATTCACGCCGCAAGTCTTCAGACCTGGTGTCGTCGGCCA CGTTCCTGACGAACAGAGACGTGTTGGGGGGACGCAGGTAGCGGGACATG GCGGCGGCGTGTCT

>Sequence 2811

CCGGGCAGGTACGCGGGGGACACCCTAGATCCCAAGATCTCCAAGGATTT
GGTGGCATACCCACTCCAGCACACAGAAGCATGAGGTTCATGACTCTCCT
CTTCCTGACAGCTCTGGCAGGAGCCCTGGTCTGTGCCTATGATCCAGAGG
CCGCCTCTGCCCCAGGATCGGGGAACCCTTGCCATGAAGCATCAGCAGCT
CAAAAGGAAAATGCAGGTGAAGACCCAGGGTTAGCCAGACAGGCACCAAA
GCCAAGGAAGCAGAGATCCAGCCTTCTGGAAAAAGGCCTAGACGGAGCAA
AAAAAGCTGTGGGGGGACTCGGAAAACTAGGAAAAGATGCAGTCGAAGAT
CTAGAAAGCGTGGGTAAAGGAGCCGTCCATGACGTTAAAGACGTCCTTGA
C

>Sequence 2812

>Sequence 2813

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## Table 3

>Sequence 2814

AGGTACTTGCGTCCGCTACAGTATGTCAATCGCTTGCCCCAGCACAGCTG
TCATTCTTCTCTACAGAAGAGCTTCTCCTCATCAACTGGGGATGGTTACA
GTTCTTCCTAAAAAAAGGATGGCTGCTCTTTTTCTAAAGAGGTTAACACTA
CAAACTGTAAAGTCTGAAAAATAGTGCATTAGATGTTTTTGGTAAACACAT
CCTGCAAAAGACAGCACCAGCACAGTTGTCCCCTATTGCTTCTGCCCCAA
GACTCTCCTTCCTAATTCATGCAAAAGCCTTTAGTACCTGCCCG
>Sequence 2815

>Sequence 2816

>Sequence 2817

AGGTACCAAATGGACAAGCCTGCAGAAGCAAGTCAGGCAACTGGCTCAAT
TTTGTATTCAGCTCAGAGTCATTTTTTTGACCTGAATAAAGAAAATCCTG
TATCCCAAAAAGAAATTCAAAGCCTTGTGAAACTCCACTGACACTAATTA
GTGGCGGACGAGGGGACAAAAGTTGTTCAACTAGTGGAACACAAGCATAT
ATCATGTCATTCTTCAGAAAAGCAACAACTGGCCAGAGTTCTTCACCTCC
TATCAGGAGTCCATAAATGGATGTTTTATTTGATGCGTGAACAGCTATCAC
GACTCTCAACGAAGTCTTTATCATCATCCAATAATCTAAGTTCAAAGAGC
AGTGCTTTAAGAAAGGGACCATCTTCAGGAACAGGCACATAACTTGCTCC
ATTGAAGACTCTTGGCTCGTTTTTTTAACAGTTGGATACCGTCT
>Sequence 2818

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#### Table 3

AGGTACTCTTTTTTTTTTTTTTTTTTTTTTTTTTTGCAGACTTTTGGCAACAT
ATTGAGAGCCTGAATTAACACTGAATCCTATGAAAACAGTTTTGTAATTA
TAATGCTGAATCAGTCTTATGTGTAATTACACCAATATGCTACTCTGGGA
AACATTTCTTAAGGGAAATGGTTCGGGGTATATTTTTGAATTTATGCCACT
GCCTTTTATAAAAAGGTCTCATTATTTCATGAACTTCAATTTACCAGGCCA
AGTCCTAACTGTAGGCTTAGGCAAGGGCCAACAATGCACGTTTTTTTCAA
GGAGCTTCGTCTGTGCTCTGAGAAACTGTGTCTTGCACAGGTGGAGAAAC
AGGGAGGCAGTTTCAGTTCTGCTTATGGCCATTTAGTGAGGGCGGGTTCT
ACATACCTAAAGGGGGGCCTAATTTTTTTTT

>Sequence 2820

AGÓTACAGAGCAAAGCTCACCACAGGTAGCAGCAGAACCTTGAGCCCCCA CATCCTGCTGATGGAAATCTGTTGTCTGGCTTCGTTTCGGCAGCAAAGTG TGGGCACACCATCAGGGGTGCTAGATTTATTCCATCGGGATTGCGCCCCG CGTACCTGCCCG

>Sequence 282

>Sequence 2822

AGGTACGCGGGCATCCTTAGGAGACCTGAGTCCTCAAGAAAACCCTCTTC
TGGAAGTAGTTGCTCCTTCAGAACGTTTTACAGAAAACACTAATGTAAAA
GACACAACTAATGTAAAAGACACAAAAGAGATGTGTTCAAAGACACATCT
CTGAAAACACAAACTACAATCATCCTCCTGAGGCAGTTTCCGCTGGGACT
GCATTCAACTTAGAACCAACTGTTAAACAAACTGAGACAAAATGGGAATA
CAACAATGTGGGCATTGACTTGTCCCCTGAGCCCAAAAGCTTCAATTACC
CATTGCTCTCGTCCCCAGGTGATCAGCTTGAAATTCAGCTAACCGAGCAG
CTACGGTCCCTCATCCCCAACGAGGATGTGAGAAAGTTCATGTCTCATGT
TATCTGGACCTTGAAAATGGAAT

>Sequence 2823

AGGTACGCGGGGAGATATTTACTTTATGAATTAAAGCTGGAGTCAGTGTC
AGCCCGAAGGCTGAAGGAAAAAGAGCAACAGATCCAGGGAGCATTCACCT
GCCCTGTCTCCAAACAGAGCCACCAAGGAGGAGCAGGGGAGCGA
>Sequence 2825

ATGCACAGAGTAGAGCCTTGTGCAGGTAAATTTCTCATCCCAGCAC >Sequence 2826

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## Table 3

GAATCCAGGGGAAGGGGAACCCCCCCCCCTTACAATAAAATCCCCTACCC CCTAAAG

>Sequence 2827

CCGGGCAGGTACTTCATCTCTCTGACCTCATTCGCATGGCATTCATGGCT GCAACTGATCATAGCAACCAGCTGCGAATGGCTGGGCTCCAGGCGCTTGA AGACATTATCAAGAAGTTTGCGTCTGTGCCTGAGCCAGAATTTCCAGGTC ATGCGATACTGGAGCAGTATCAGGCTAATGTGGGAGCTGCTCTAAGACCA GCCTTTTCACAAGATACACCATCAGATATAATAGCGAAAGCTTGCCAGGT ATGTAGTACCT

>Sequence 2828

>Sequence 2829

>Sequence 2830

>Sequence 2831
AGGTACATCGGGCACATTACCACACCAGGCGAGGGTCATTCGCTTCCTTG
TCTGTCACCTGGGGTTTATGACAATCTCGGTGGTAGAGATTATGGCACTC
CTGACATTCTACTAATTGATTGCCAGATGCCACCATCATTTGCCTACAAA
CAACGCAGGCCAATCCCATCTCCATGGCAAAATCATCAGCACTGGTCTCC
TCAAAACTGGAAAGGTCAGCCATAGGTAAATCCTTGCTACTTTGGACAGT
TAATGGGAGATGACTGTTTCTGGTTTCCCATCTAGGTTTCTTTTGACAGTTCCTTTT
TCAGCTTCCTTCAGTGATGTCTGATTTCATTTTATCAGCAGGTCTCTTT
TCAGCTTCCTTCTTTACCTTTTCAGTTGTGAGGACCTTGCCATTATTATT
ACCAGAAGGAAGACTGGATGATATTTTTGGGCTCTTTGATTTATTGTGCTTGAAATTTTTGGGTGGCTCTTCTTTAATGGAAATGT
TTTTTGTGCTTGAAATTTTGGGTGGCTCCACATCCTTTTGAGATGGACGG
TAACTGGAATCAATGCCCCGAGCCAAAGATTCATCAAGCCCCGCGTACCT

>Sequence 2832

> Page 582 of 685 of Table 3

### Table 3

>Sequence 2833

>Sequence 2834

>Sequence 2835

AGGTACGCGGGGATCTCACAGAAAATGACCAGGTGTGGCTCCAGCTTCCCAATGCCGAGTCAAATGGCC

>Sequence 2836

AGGTACGCGGGGAGTCCTGAAAGGGTGGGCAAATGTGCAGCTCTCCCTCA GGGTCGTGGGATCTGGGTCCAACAGTCTGGCCTTTCAGCCTTCAGGCTGT TTTAGGCTTGAAGTTTCGTGTGGCTGATCAAAGAAAGAAGGCATACGCAG ATTTCTACAGAAACTACGATGTCATGAAAGATTTTTGAGGAGATGAGGAAG GCTGGTATCTTTCAGAGTGTAAAGTAATCTTGGAATATAAAGAATTTCTT CAGGTTGAATTACCTAGAAGTTTGTCACTGACTTGTGTTCCTGAACTATG ACACATGAATATGTGG

>Sequence 2837

> Page 583 of 685 of Table 3

# Table 3

>Sequence 2838

AGGTACACCAGAACTTAAAGTATAATAATAAAAAATAAAGTATTACAGAA CATGGTCAATTATATAAAAAGTAGATTAATTAATGTCCATATATACATT TGTTTATTTTTACTTATTAATTTATTGCAGAGATGGGAGTCTTGCTATG TTGCCCAGGCTAGTCTCAAACTCCTGGCCTCAAGTAATCCTCCCACCTCA ATCCCCCAAAATGCTGGGATTTCAGGAACATGCCACTGCACTTTATTAGT ATATATATATATACACACACACACCATACACACCATAGTAGAATAAAT TAATTATATTTTCTACAAAAATTATTTTCAATCTTTTTTGTTACAATGAG TATCATTTTCACATCTTATCTTAAAATGTCCTGAAAGGATTCAATGCCAT GCCAATTTGTTTTTTGGAAAAATCCTGTCCTTGTTTTTACAACCTTAAT ATTTTACAAAAAATCATTTTCCCTTAAATTATTACATTTGTTAAATTTTT GAAAGTAAAATTTTCAAAAAGCGACCGCCAGGGTTAAATGATTGTTTGGG GGAAATGTTCCAAATAACTGAAACCTTTTGTTAAAATGCCTTTCCCCTTT AAACGAAAAAACCCCAAACACATTAAATTTAATTCAAGGCCAGCTTTTT TTTTTTTCTTTGGGG

>Sequence 2839

ATGGCCTCTTCTAGGCAGATCCGTCTACAACTGGTAACAGCAACCATATC
GAGTTTCTCTTTATCACAATACCACGAGGCTTATCATCATCATTGCCATGCCT
TTAGTAACATCACTTTTTTAAATGGGCATTTTCACAATGTAATCTGCAAC
CTACATATAACATGCACTCTTTATTGAAGGCCGTACCTGCCCGGGCGGCC
GCTCGAGAGACACATTACCTGAATGAGCAGGTGAAAGCCATCAAAGAATT
GGGTGACCACGTGACCAACTTGCGCAAGATGGGAGCGCCCGAATCTGGCT
TGGCGGAATATCTCTTTTGACAAGCACCCCTGNGAGACAGTGATAATGAA
AGCTAAGCCTCGGGCTAATTTCCCCATAGCCGTGGGGTGACTTCCCTGGT
CACCAAGGCAGTGCATGCATGTTGGGGTTTCCTTTACCTTTTCTATAAGT
TGTACCT

>Sequence 2840

>Sequence 2841

>Sequence 2842

CAAATGATTTTTGGGATTCGGCCAACACCCCGGAAAAGGCCCTTTAATTA ATGGGAGCCNTTTACCTTTCTTTGTAAATGAATAGACGCCCTTGGGAGTT TAGGTTCCGGGAGGCGTGTTACATTACCCGCAAGAGGGTTTATCGGATTT TTCCAAATTTTGGGGATTACACCCCGAAAAAAATTTTGTCCAAAGGCCGC

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## Table 3

CAAAG

>Sequence 2843

>Sequence 2844

>Sequence 2845

AGGTACGCGGGGATTGTGCAAAATCAGAGAGGGGTGCAAGATCCTGAT TTTTCAGGAGTTCAAGCGACAATGGCAGCCCAATACGGCAGTATGAGCTT CAACCCCAGCACACCAGGGGCCAGTTATGGTGAGAGGGCATTCAGTGCTC CCCATACCAGGCTGCAGGGAGGGCCTGGAAGGCCAAGAGCCCAGAAATTCC CAATTGAGAATTGTTTAGTGGGTAAAACCGGAGCAGGAAAAAGTGCAAC AGGAAACAGCATCCTTGGCCGGAAAGTGTTTCATTCTGGCACTGCAGCAA GAACTTGTCGTAGTTGACACACCAGGCATTTTCGACACAGAGGTGCCCAA TGCTGAAACGTCCAAGGAGATTATTCGCTGCATTCTTCTGACCTCCCAG GGCCTCATGCTCTACTTCTGGTGGTTCCACTGGGCCGTTACACTGAGGAA GAGCACAAAGCCACAGAGAAGATCCTGAAAATGTTTGGAGAGAGGGCTAG AAGTITCATGATTCTCATATTCACCCGGAAAGATGACTTANGTGACACCA ATTTGCATGACTACTTAAGGGAAGCTCCAAAAGACATTCAAGACTGGATG GACATTTTCCGTGACCGGCTCTGTGCGTTAAAACAACAAGGCAACAGGCG CTTGACACGAGGCCCAAAGGGCACAATTGCTGGGCCTGGATCAACGCGTG GTAAGGGAAACCAGGAAGGCTGTTCACTAATG

>Sequence 2846

CCGGGCAGGTACTTTGGGAGGCCAAGGCAGGTGGATCAACTGAGGTCAGG AGTTTGAGACCAGCCTAGCTAATGTAGTGAAATCCTGTCTCTACTAAAAA TACCAAAATGCGCTGTGTGACGTGGTGCATGCCTGTAATCTCAGCTACTC AGGAGGCTGAGGCAGGAGAATTACTGGAACTCAAGAGGCAGAGACTGCAG TGAGCCAAGATCGTGCCATGGCACTCCTGCCTGGACAACAGAGCAAGACT CCATCCTTAAGCTCCCTGACTTGCTGCTCGTCCTTTCTCTGGCAAAATCT CATCCTTGGATGAGCCCGACTTCGTGTTTTGCTCAATGACACCACTCACCT GAACCAGAAAAAAAATCAAAAAGTGGTCAGAGATATCATCATAAATTCA AATTATTTACATAAAAAATTGGCCCTAAATGTTTTCAGAAATCAATTAAA GTTTTGTTTCTCCAAAGACATCATTTCTTTAAAAACCCAACGTGAATAAC CTATTTTTCTATGGTCTTCTAACAATTATTCAACTTCTCTCATCTGATA TCTTGCCCAATCACTCAAAGAAAAAATATTTTCCCATAAGGCAGGAGCCC GAACATATTTCCATTCACCTGAAAAAATATATGCCACAGGATGCGCCCAA CCTTACCTTTGTCTTGGCTTAATATGTGTAGAAAAAAGGTCCTCTGGGCG GTCTAGAAAATAGTGGATATCCCCGGCCTGCCAGAATTCCAAATTAAGCT TAATTGAACCCGGCAACCTGG

>Sequence 2847

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> Page 585 of 685 of Table 3

## Table 3

AGGTACTGGCAGGTACTGTTTTCTTTATTACCTCACGTCTGGGAATATCT GGAATTTAAACTAGTAATTCAGCTCCTCTTCAGCACTCACAATATAATCT GTTGCCAATGCCTGATGAGACACATAGCTATGACCATGGCACTTCTCTTT TTTTCCATGGTTCGCATTCAGGAGGTAATTTCCTTCAGCTACTACAGGAT ATCCTTCCTCATCAATTAAAAGAAATATTCGGTCAAATGATTTTTAAATA AAAAACGGTTCTTACCTTCTAATTGTCCATTTATTTCATCTATCACTTTT GGAGGCGCACCCTTGGGTAAACACACATGCTTCTGTGAAACAGTCTCACA GAGACTCTCAGAATCCCAAGAACTTTCTTCATAGTCCTTTTGCTTTGGAT TCTGGAGGGAGGATCTAATCTGCTCTCAATGTTTGTTCATTCTTCAATTC CAAGGCTTTATTTGGAACAGACTTTTGCATTTCAATGGCAGGGCTCAAA GCAGATGGCCTCTTGGGAGGCTCTGCTTTGCAAGGTGGGATGTCCCATAA ATTCTTAAGGCTTTACTTGGGAATAAGAAACTATCATTTCCGCAGTTAGC CCTTCAGAAAGACCCATTTTTAACAAGGAGACCCTTTTCATTTGGAGAGA AAGGTTCTAAAATTCAACACGCAATTTGACCTTCTAAAGTTGCCAATTAC ATTGAAGCCATATCCTTTGGGAGGGGAACCCTTGGGTAAAAACACATTCT TTTGGGAAACATTTTCCGAAAACTCTCAAACTCCAAGAACTTTTTTATTA GCCTTTGGTTGGATACCGGAGG

>Sequence 2849

AGGTACTTGGATTTTATTTTTTCGTTTTTTTCCTATTGATGTTATATTAT TGCGTCGTAAATAAGGAGTAGGTAAGACATTGTGTGCTTTAACAAGTGAG GCACAGTTTAAAAGTTTTAAACAGCAATTAAAAATACAGTACAGTGCATA AATAAATAATATCTCCACTTCTAGTCGAATTTTGAAACCCTCAGTGTA AATTATAACTTCACTTGAATGGGAGGCACAAGGTACATGTGCTAATGTTC TGTAAATCCAGAAAATCATATCACATACGAGTCAATAAGGAATTAAAGAC ATCAAATTAATCACACTTGTGTTAACTAAATAAGAATAGGTCAGATGCCT GTTTCCAAGTTATGCTGGGTATATAAAAAGCTTCTCTGCATTCATAGAAA AGTTTGAAAAGGTTCATTGATGAAAGCACCTTGCATTTCAGATGAACTTA TTATTTTCGGGGCTTTTTTATATAAGAGCTTTAACAAGTATATATGCACC TGTATATGAATAGATATTGATGAAAGGGGCCCTACAGGCTTAAGAGTA GTGCACCATCAGAAATATTTTAGGGGATACAGTGTCTTTTTAAATTTGAA TATTCAAGTGTTTCAAGGTCTACAAGGTTATATGAATACCTCCTTGGATG GTTTCTTAGAAGGTTCTTATTATTATAGTTAAGAAACAGGCTTTTTTAAA AGGGAAATGCCGTAGTTTTTAAAATAACCGGGTTCCTTGCCCGGGCGGCC GGGTTTAGAACTAGGGGATCCCCCGGCCTGCAGGAAATTGAATATCAGCC TTATCAAACCCGCGACCG

>Sequence 2850

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#### Table 3

AGAATAATTCTCTTTAAACCAAAGTTTAAAATATCAGGAGAAAACATAAT AAAAGCATCATTATGAAAGTATCTAAATACTTTCATTTTAAATTACAACT TACCATATAAGGAATATTCTGCTTCCTGACCTGTGTCACTCTCACTGGAA GTTGATGTGAGGCTGGTGGTTAAAGTGTTACTTAAAGATTGACCAACTGA TAAAACTATTGTTGCTGTAGCTACATTGCTGCTGCTAGTAACACTGGATG TTGACATAATCACTGTTGATGTAGTACCTGCCCG

>Sequence 2851

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>Sequence 2852

TCTGTAATGCGGCGTAAGAAGAAAACTGGCTCCCAACAGAAGCAGAAAAG AGAAGCGAAAAGCAATAATACAGACTGTCACCTCTAGGGTTTATGCTGTC ACTAGGATACATCTTTAGCATTCTACTCTGCTTAGAAATAAAGCACAAGA AGATAAAGTATTATGGAAAGCAATTGCCCTATTGATTATTTCCTAGGTGT CTAAATCACAATCATTTAAGCTAATTATACACCAGCATATGATATCTAAC CAGAGAAGAAAGGTCTTACCCACGTGTGCTCAGAATCATGCTGCTATGAA ATGCCCGAGTATGGGTTCCTTTTTATAAGTAAGCTCTGTAATGCCAAACT TCTTTTCTTTATACATAGTGAGGGTAATCACAGGGAGTCAGAGCTTAGGA AATAATCCACAACTTTAGTATCCTCTTCAAATGTCTTGCTTTATGGTCTT GTGTATAAGCCAGGATACTCCAAAATTTCTTTTAATCAGACTTGTTTCCT TAAATATCACCTAAGTTTTATTGTTTCTTACCATTCCTCTTTAAAGAGGA TCTTTCCTAATAATTCTTTTTCACCCTTACACGGGAAATAATAGCCCAGT GAAGCATAATTTAATTCAGTAGGGCCATAAGCCCGTGCTCCCATGGGCAC CTGGTGGTGCAAATAACCCTATACCCGGGGACTGGGGTCCAATCAAGGGC TGGCTTTCCATATCATCGGGCCAGGCACCACACTTGATGTGTACCTTGGC CGCTCTAAACTAGTGGATACCCCGGGCGGAGGAATTCTTAATCAACCTAT CAATCCCTCCC

>Sequence 2853

>Sequence 2854

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## Table 3

CCTTCATATTGTTCTTCACCATCTGGAAAATTCATCACGTTTGGTAGGCA TTTCTGAAAGAGGGTATGCCTTGGGCTTACGGGTCAGCAAAGCTGCTTTA CTCCTCAAGCCTTTTAAGCGGGAGTTAAGGCCGGTTGGGGCACTTACCAA TGAAGCCGGTTTGTCTGAGGCAACTGTTG

>Sequence 2855

AGGTACAAGTTCCTAGGCAGGTCCCAGCACACTCATAATAAGTGTGATAC
AACAGGGTTTTAGTCATGATGTTCCCCGACCACGTAGTGTGGGTGCAGTG
GAGGCATCCCTCCCAGGGTTCTCCTTTTAACATGGATAAGGGGAGTAGCA
AGAACAAAGTGATGAGCATGTTCATACCCAGCATGGACAGAAAAGGC
TTTTTCCTGGGGGGAGAAGGCTAAGCAAAGTGGCAGCTTAATAGCAAAGT
AA

>Sequence 2856

GGTTAAAGCGAAACCACCGCGGNGGCGGCCGCCCGGGCAGGNACGCGTGG
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TTAGGAAACCGCAGAGAAGTTGTCCTCTCTAAGAAAGATAGAGATTAATA
CAACTACTCAAAAAATATAGTCAATAGGCTACTAAGATATTGTTTAGCGG
TAATTTTTTAACGGAATGGTAATAGCCCAAGAAAATAAGAGAAAATATGA
AGACTCAGAAGAGTAGCATGAGGAAAGAAAAAAAAAGGGGCCTAAAAC
ATGACGGAGGTTGAGATGAAGCTCCTTCATGGAGTAAAAAATGCATCCAA
AAGAAAATGGAGAGAAAAGGCTCCTTCATGGAGTAAAAAATGCATCCAA
AGGACAATGCTCTTTAGATTAAAATGAAGGTGACTTAAACAGCTTAAAAGGCT
AGGGCAAAAGTGAGAGGAGACCAACAAAATGCGAAGGCATCTTTGAAAA
AGAGATCAAACCGAAGGTGAAGAAAAAGACCTTGACATCCATGACGCAAGG
AGAATCGCGACATTTAAAGCCTAAGTAACGCATTGAACAACGGCGGACG
AAAAGGGGAAGATAAAACGGGAGAGAGAAACA

>Sequence 2857

>Sequence 2858

>Sequence 2859

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## Table 3

>Sequence 2860

AGGTACTATNTTTTATTTATATTTATTTTTGGAATGTAAATCTTTTATTAA
AACAGTTGTCTTTCCACGGTAGTAAAGCTTTGGCACATACAGTATAAAAA
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AGTGTTTTCAATACAATTTTTCCGTATAAAAATACTGGGAAAAATTGAT
AAATAACAGGTTAGAGAAAGATTTTTCTAGGCAATTTCTAGGGATCATTT
TGGAAAAAGGTGGAGTACTGTGGGATATTTTAAAAATATTAACAGTTAAC
CCAGGATCATGGCCTTGGTTCCTACCAGGTATTTTGGCGGGCCCAGGACAC
TTTTAAATGGAAAAGGCAGAAAGGTGTTTTTGGGGGGGGAACTTTTTCCTAC
TTA

>Sequence 286

ATÁCCTCACCGTGGCTGCTGTCTTCCGTGGTCGATGTCCATGAAGGAGG
TCGATGAGCAGATGCTTAACGTGCAGAACAAGAACAGCAGCTACTTTGTG
GAATGGATCCCCAACAATGTCAAGACAGCCGTCTGTGACATCCACCTCG
TGGCCTCAAGATGGCAGTCACCTTCATTGGCAATAGCACACACCATCCAGG
AGCTCTTCAAGCGCATCTCGGAGGCAGTTCACTGGCCATTGTTCCGCCGG
GAAGGGCCTTTCCTCCACTGGTTACCTTCGGGCCGGTTCTTAGAACTAG
GTGGGAATCCCCCCCGGGGCTTGAAAGGAATTTCGAATTTTCAAAGCTTT
ATTCGATAACCGGTCGAACCCTTCTAAGGGGGGGGGCCCCCGGGTACCCC
AGCCTTTTTTGTG

>Sequence 2862

>Sequence 2864

>Sequence 2865

>Sequence 2866

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#### Table 3

AGGTACGCGGAGCAGAGGAAACATCCTGTCCAATTCTAGGTTTTCCTCC
CTTGGCCTCCTTTCCCCAGCATTGTCTACCCTGGCCCACTTCCTGCATTC
TCCCCATGCCCTGCTATTTCTGATTCTTTGCTTCTCCTAGCGAGATACTT
TCCTTATATGATAGCTGCTGAGAAGTTTCCCAGAACTGCTAGAGGAAAAG
AAGTGGGGAATTTAGGAAATATCCCTCACTGACCTAACTCCATTATCTTC
ACTCTTTCATTCTTCCTGCCACCTCATGCCCATTCTCTTTACTGTCTAGC
ATGCTGAAAGAAGAAGGAAGTGATCTAAATGCCAGCGTGTTCAGTGGTAAATA
TTAGTTGGTGCAAAAGAAAAACCATGATTA

>Sequence 2867

>Sequence 2868

AGGTACAGAGGGGTCTGTTTCTAAGTCTGGAACCTCAACACGAGGCTGGG
ATGCTTTACAACGTGCTCGTCTCCCACTGTCCAGCCATCTTTGGTGGTCT
TCCCACAGTGCTTCCCCCAATCCTTTCACACTCCTGTGGAGGGACCATTG
GGACGGGCCCAGGAGGGAAACCTTGGGGATCACTCTGAACAGGAAAACGG
ACCAAGCCACCAGCTGCCCAAGGAGACCAGGTTGGCTTCTTGGCCCTCCA
AGTTCCTTTCAAATTTGTTTAAGTGCTTCAGGGATTCAAACCAGGAAGAA
ACTTGTGAAAAGGCCAGCCAAAAATTCTTGGGAAGGAGGCCAGGGAAGAA
GGAGGCCCCCAAAAGGGGAATGGTTTGTTGCCTGGAGATGGACCGGGT
TTTAACCAGGAATGGAAAACCATGAAATTTTTCCATGGGGAGAAATTCCT
TTTGGTTTACCAAAGGGAAGAAAAAATTGCTN

>Sequence 2869

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TGGGCCCTCATACACAAGCGTGTCAGGCTGTCAGTGTTTTGGTGCACGCTG
GGGAAGAATTTACTTTGGAAAGTAGAAAAGCCCAGCTTTTCCTGGGACAT
CATTCTGTTATTGGTTGATGTATTTTTTTTACCATTGTCATTTTTTGGATCT
AAGGGTTTGCCATTTTGCTGACTTAAAGGGTTANCCCGATTTTCAANNAG
TCCAGGATACCCCAAAGCATGTGGGATATNGNNTTTAGCTTACGTTTACT
TTCAACAGCCAGCGAACTTGACATT

>Sequence 2870

## Table 3

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ATAATGAAGCCTGACTCAGCTAATGTCACAACATGGTGCTACTTCTTCTT
CTTTTTGTTAACAGCAACGAACCCTAGAAATATATCCTGTGTACCTGCCC
G

>Sequence 2873

AGGTACATTTGCCTTGCTATAAAATAATACCTAAGGCTTGGTAATTTATA
AAGAAAAGAGGTTTATTTGGCTCATGGTTCTACAGGCTATATATGAAGCA
TAATGCTGACATCTGCTTCTGATGAGGACATCAGGAAGCTTAAAATCATG
TTGGAGGTTTAAGGGGAGCCAGCATATATCACGGCGAGAAAGGAGCAAGA
GACAGAGGGGCATACCACACCTTCTTTAAACAACCGAGATTTTTGGCTTGAA
TCTCAGAGCAATGAAACTCAGCTCACTTACCAACCAAAAAAACAGCATTGA
AATTCCATTTCATTGGAAGTTATTCTTACTTGCCATGTACTTCAAAACAA
CCTTCCTCATTCAGGCTTTCCACCCTTT

>Sequence 2874

AGGTACCATTTTATTTAGTGTTGTAGGAAATGTTGGGTTACTTCTTAAAA
ACGAAACCAAAGAAATTCAAAAGTCCCAAAGAAAGAAAGCAGGAAATAAT
AATTCTATAATCCAAAAACGTTGGGCGATCCTTCAGTTGGAGGAAGAGGG
CGTCAGTTAAGTAGCTCACACAGTAGATATGGAGACACCATATGGAGATA
CGGAGTTAAGTTTGGTGGATACTAGGAATTAAGTTCTCCACCTAAGGCAA
TTAATTTTTCAGCCTTGAGAGATAATTAGTAGTTCTAGAAAAAGAAAAA
AGTTGACTGGGAGAAAGGGTGGGAGGGAGGGATGGNTGCGTCATTTA
>Sequence 2875

>Sequence 2877

>Sequence 2878

AGGTACGATTTITAAAATCTAGCACATTTAAAACACTGTTAGTTCAACTT CCTTATTTATGGAGAATTTTAGGAATACTCAATTTACATATCTGTATAAA TCATGACAGAGCTCCTTTTAAAAGCACTTTATAATCTAATTTATCAATAC CCCCCAAATACAGGAGAACATTATACACATAAATTAGATATAGGCCCTTT GTTTAATTTATAGACACATACTTTTGCAAAGACATCATATGAGAGTCTTA GTTAAATTAGTTTTCAAGTTTCTGCAATTTTGAAGCCCAAAAACCCAGGA

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## Table 3

GATAACAAGACATTAGCCCGACCACCAGTCTTCGGTTCATGTGAGTTCCC CTAAACCCCAAGAAGCTACTAGCAGGAAATTTAAAAGACTACACCACTCC AGAATATATTAAAATTTGTGGAAGTGGGTTGAAATC

>Sequence 2879

>Sequence 2880

CCGGCAGGTACGCGGGATTGACATCCCACACTACCTGATTTGATACACT
AAGAAGGGCTTATCATTTCTGTGGTACTCTTGGCCAACAATGCACGTGTA
ACATTTATTCATTGAAACACATTAGGCAGAATTGCAGGACATTCTTCAAA
ATAGCTGTCCAATACTCTTCAAAAGTGTCAGGTCCTGGAAGACAAAGAGA
TACTGAGGAACCATCACAGAGTGGGAGAGGACATAGAGTGATAAAAACTA
ACTGTGATGTGGAATCCTACATTGGATCATGGACCAGAAAGACACCTG
ATGGGAAGACTGATGAAATCTGAATAAGTCTGTAGTTTGGTTTAAAGAAG
AAGAATAATAACACTAATGGTTTAGCTGCT

>Sequence 2882

CCGGGCAGGTACAAAGACTATTGTAGAGACTATCCGGGTTAGTTTGCAAG
GGGAGCCAATGATGAGTAATTTGAAAGAAATTCACCTGGTGAGCAATGAG
GACCCTACTGTTGCTGCCTTTAAAGCTGCTTCAGAATTCATCCTAGGGAA
GAGTGAGCTGGGACAAGAAACCACCCCTTCTTTCAATGCAATGGTCGTGA
ACAACCTGACCCTCCAGATTGTCCAGGGCCACATTGAATGGCAGACGGCA
GATGTAATTGTTAATTCTGTAAACCCACATGATATTACAGTTGGACCTGT
GGCAAAGTCAATTCTACAACAAGCAGGAGTTGAAATGAAATCGGAATTTC
TTGCCACAAAGGCTAAACAGTTTCAACGGTCCCAGTTGG
>Sequence 2884

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# Table 3

AGCTCTAACGCTGTGGAAGCCTTAATTAAAAAGGGTGCAGACCTAAACCT TGTAGATTCTCTTGGATACAATGCCTTACATTATTCCAAACTCTCAGAAA ATGCAGGAATTCAAAGCCTTCTATTATCAAAAATCTCTCAGGATGCTGAT TTAAAGACCCCAACAAAACCAAAGCAGTTGAGTGATGTCTCTTCCCCAAG ATCAATAACTTCGACTCCACTATCGGGAAAGGAATCGGCATTTTTTGCTG AACCACCCTTCAAGGCTGAGATCAGTTCTATACGAGAAAACAAAGACAGA CTAAGTGACAGTACCT

>Sequence 2886

AGACCAAGACCGAGACTTGGAGACCTGATTGAGATTTCTCGCTTTGGCTA
TGCACACTGGGCCGTCTACGTGGGAGATGGCTATGTGGTCCATCTGGCTC
CGGCAAGTGAAATTGCTGGAGCTGGTGCGGCCAGTGTCCTGTCTGCCCTG
ACCAACAAAGCCATAGTGAAGAAGGAACTGCTGTCTGTGGTGGCTGGGGG
AGACAACTACAGGGTCAATAACAAGCACGATGACAGATACACACCACTGC
CTTCCAACAAAATCGTCAAGCGGGCAGAGGAGTTGGTGGGGCAGGAGTTG
CCTTATTCGCTGACCAGTGACAACTGCGAGCACTTCGTGAACCATCTGCG
CTATGGCGTCTCCCGCAGTGACCAGGTCACTGGTGCAGTCAT

>Sequence 2887

>Sequence 2888

AGGTACTAGCTGCATCCTTTTCTATGCTCTCCCTGCTGGTGATAATGGGA GATACAGACAGTAAAACGGACAGCTCATTCATAATGGACTCGGACCCTCG ACGCTGCATGAGGCACCACTATGTGGATTCTATCAGTCACCCATTGTACC TGCCCG

>Sequence 2889

>Sequence 2890

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>Sequence 2891

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## Table 3

>Sequence 2892

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>Sequence 2893

>Sequence 2894

GGGGACACGTGAACGACTACCTGAGGACGATCTGGACCATTAGGAGTTCC
ACCGCGGTGCGCGGCGAGGTACGCGGGGGAGTCCTGAGCTGCGTCCCGG
AGCCCACGGTGGTCATGGTTGCCAGAGCGCTCTGCATGCTGGGGCTGGTC
CTGGCCTTGCTGTCCTCCAGCTCTGCTGAGGAGTACTGTGGCGCTCCGTG
AAATTAGACGTTATCAGAAGTCCACTGAACTTCTGATTCGCAAACTTCCC
TTCCAGCGTCTGGTGCGAGAAATTGCTCATGACTTTAAAACAGATCTGCG
CTTCCAGAGCGCAGCTATCGGTGCTTTGCAGGAGGCAAGTGAGGCCTATC
TGGTTGGCCTTTTTGAAGACACCAACCTGTGTGCTATCCATGCCAAACGT
GTAACAATTATGCCAAAAGACATCCAGCTAGCACGCCGCATACGTGGAGA
ACGTGCTTAAAAATCCACTATGAAGGGAAACATTTCATTCCCAAAAGGNG
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>Sequence 2895

>Sequence 2896

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### Table 3

TGGAGAATGTTAAAACATTATTGAAAAACATATCGACTAAAAAAGATAAA AACAATCCCAAATCACTTTAATACTTTAAATAAATTCACCAATAGAATTC TACTCAGTGTTAAAATACTGGAGAAGGCTGGGTGCAGTGGCTCATGACTG TAATCTCAATACTTTGGGAGCCTGAGACCGGAGGATTGCTTGAGCCCAGG AATTCAAGACCAGCCTCAGCAACATGGCAATACCCCATCTCTACAAAAAA AATTTTAAAAATTAGCTGGGTACAGCTGGGCACAGTGGCTCATGTCTGTA ATCCCAGCACTTTGGGTGGCTGAGGTGGGTGGACCACTTGAGGTCAGTTC ACAAAAATTAGATGGGTGTGGTGATACACACCTGTAATCTCAACTACTTC GGAGGCTGAAGCAGGAGAATTGCTTGAAACCTGAAGGGAAAGCTTGCAGT GGGGCAAAATTGCACCACTGCACTTCAGCCTTAGGGGACAGAGGTAGGGA GAACTCCTCTCAAAAAAAAAAAAAAAAAAAAAAATTAAGGTCCCTGCCCGG GCGGCCGGTCTAGAACTTATGGAACCCCCCGGCTTGAGGAATTCAATTTC AGCTTATTGGATCCCGCGACCTTAAGGGGGGCCCCGGACCCAACTTTGTG TCCCTTTGTGAGGGTTATTGGCCGCCTGGGGTAATAAGGGCAAAGCTGGG TCCTGGGGAAAATGTATCCGCTACAAATTTCCTCCC

>Sequence 2898

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>Sequence 2899

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CCGGGCAGGTACGTCCATCTTCCAGCTGCTTGCCAGCAAAGATCAGTCTC TGCTGATCAGGAGGAATTCCTTCCTTATCCTGGATCTTGGCCTTTACATT TTCTATCGTATCCGAGGGTTCAACCTCGAGGGTGATGGTCTTCCCCGTAA GGGTTTTCACGAAAATCTGCATTTTGGTGGCGGCTCCACCGCAGATGGCG

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## Table 3

GATCGAAAAGCCCĆGCGTACTCGCCAGTCCAGCCGCTCCTGCACACACAT TCACCACAGTCACAGTCGCCGTTACCTCCGCAGAGCAGCCCTTTGTGTCT CACGCAGGAGAAATTGTCACACTGGCAATCCCGCGTACCT >Sequence 2901

>Sequence 2903

CCGGGCAGGTACTGTAACTCTCAGTCTGAGACCGAAAGCCTCAAGACCTG NGGGGCCTCTGGTGTAAGTCCTGGAATCCAAAGGCTAGTGAGCCTGGA GTTCTGATGTCCATGGTGGCAGAAGTCTGTCCAGCTCTCAGAGAAAGACC AGCTTGCCTTCTGTATCTGTTCTCTCTGGGCCCCTGGCTGATTGGATGGT GCCCATCAACAATGAGGGCAGATCTTCCCCACCTCATCCACTCACGCTGA CACATTAATCTTCTCTAGAAACACTCTGAGACGTGCCCCAAATAATGCTC TATTAGGTTTCTAGGTATTCCTTAATCCAGTCATGTTGACACCTAAAATT AAGTCTACAGGTCTACCCCTTGCAACTTGGCACCCATATGCATGTTTTTA AACCCGTATTTAAATTTCCAAATAAGGACAATACCCAGGTGATATTATAA TTTCTCCTGACATGATATAACCTATCCGCATCCAGCCAAAAATGCCCTAA TTCCTTCCCTAAAATTTGGGCTTTAGGAGTTCAACATTTGGGGATTTAAA TTTTTTAGAATTTATGATTTTTGGGGGCCTTTAGATGTTTTGGGATTTTAA CCCTTAGGGGATTTTGGTCTTTAGGAATTTTCAAAATTTGGGAATATGAC CTTTTGAGAATATGTCTTTTGGGATTATAATTTGCACCTGGTTTTGCCAA CTGCCTGGGCTCTGTTGGCTATTTAACCTTTTTAACCACTTCCTTGAAATT TAATTTTCGTTTATAACATCTGGTCCCTAATGGCCGTCCTTTATTTT >Sequence 2904

TGCCGCTTTCTGTTCAAACCTGCAGTTACAGAAACTCTCCCCCCTTTTCC
TTAG

>Sequence 2905

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## Table 3

AGGGAGAGGTGAGTCAGTTCTCAGTGTCAATGCAAACTTAAAAGCTTCGG AGTGACTTGGTTAAAATAGAATTTTAAACCCATTTTAAAGCTTGTTTCCC CGGGTCACTGCCCGGCCGGCCGGGTTTATAAACAATGGATCCCCGCGCTT GGTGGAATTCAATTTAAAGCTATTCATTACCGCGACCTCCAGGTGGGGCC CGTGCCCCATTTTTTTGTCCTTTTT

>Sequence 2906

>Sequence 2907

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>Sequence 2909

CCGGGCAGGTACTNNNTTTTTTTTTTTTTTTTTTTTTTTACAGTCTCAT AGGTAGAAGGAACTTGCCTTGAGTCTCAGATGAGACTTGGGACTTAGGAC TTTTCAGGGGAGGCTGGAATGAATTAAGACTTTGGGGACTATTGGAAAGA GATGATTATATTTTGTAATGTGAGAAGAGCATGCAATGTTGGGGGCTGGA GGGGAATGATGTAATTTAGATATTTGACCCTTCCAAATCTCATGTTGAAA TGTGACCCCCATTGTTGAAGGTGGAAGCTGATGGGAGGTGTTTGAGTCAT GCAAGAAGATACTTCATGAATGGATTCATGCTGTTTTTGGTGGTAGTGAGT GAGTTCTTGCTCTGAATTCAAGCAAAATCTGGTTGTTTAAAGAGTGTGGA ATGCCCCTCTGTCTCTAGCTCCTTTCTCACCGCGATATATGCTGGCTCCC CTTAAACCTCCAACATGATTTTAAGCTTCCTGATGTCCTCATCAGAAGCA GATGTCAGCATTATGCTTCATATATAGCCTGCAGAACCATGAGCCAAATA AACCTCTTTTCTTTATAAATTACCAAGCCTTAGGTATTATTTTATAGCAA TGCAAATGTACCTCGGCCGCTCTAAAACTAGTGGAACCCCCGGGCTGGAG GAATTCGAATATAAGCTTATTGATACCGGCCACCTCCAGGGGGGCCCGGG AACCAACTTTTGTTCCTTTAATGAGGGTAAATGCGGCTTGGCCAAAAAT GGCCAAAGCTGTTCCTGGGGGAAATGGTATCCTCACAAATCCCACAAATA CGGGCCGGGCAAA

>Sequence 2910

> Page 597 of 685 of Table 3

# Table 3

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>Sequence 2912

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>Sequence 2913

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## Table 3

CCT

>Sequence 2914

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>Sequence 2915

AGGTACACTTCTCTTTCCCTGAATATGACTTGCCTCTGGTGAACAGAATT
TTGCAGATGTAGTTAAGCTCTAAAATCAGTTAGTGTTTGGCTCATCAGTA
GGGAAATTATCCTGAGTGAGCCTGATATACACTGATATGACAGGCTATTC
TTGCTGACTTGATGAAGCAAGCAGCCATGTTGAGGAAATCCACATGGCTA
AGAACTGTGACCAGCCTCTAGGAACTGTAGGCAACATTTAGGGCCTGAGA
TTACCCAGCTAAAAGTCAGGAGATAGCTTGGGATTTCAGTCATACTGTCA
TAAAAACATACATTTTGCCAGCAAACTTCATGACCTTGGAAGCAGACTCT
TTCCCAGTCAAGATTCCAAATGAAAATTCAGCCCAGCTGACA
>Sequence 2916

>Sequence 2917

>Sequence 2918

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# Table 3

AATGAAGTTAAAATAAAATTCTTATTGAAATATTGGAATCAAATGATGCA
CTGGAGAGACTATTCTTTATGATTTTGACATTTGGAGTCCTCTTTGGGGG
ATATTATTCCCTTGAAATTTTGGGACTTGGGGTGTAATGGTTAAAGGGTT
TTGCTCAATAAAATTCTTGGACCAATGGTAATAAAATGGTAATCTAAA
GTTTAGGATTCATATAAAAACCACTTTTTAAGGTTCCGGGTAGGGAT
>Sequence 2919

TTAACTGCACTCACTATACTGCGAGTCGAATCGCAGCTCCACCGCGGTGG CCGGCCGCCCGGCAGGTACGCGGGAAGAAATGGAAATTCTCTTGAAGCT GGATTTCCCACTTGCTGCGGGTGTGTGCTTTGCTTAACATGTTAAAACCT GCAGGCGTGGTGGCTCATGCCTGTAATCCCAACACTTCGGAGGCTGAGGC AGGAGGATTGCTTGAGCCCAGGAGTTCAAGACCACTCTGCACAACAAAA GCTGACTGTTAAGGAAAGAGCACCCACATCTGCTCCTACTTAGCTTTTTT CTCCTTTCTTTTCTTGAAAGAGTTTTAAACAGATAAGATGGCAAA AGTGACTGATCTCTACTCCCCCAGTTTGAATGGTAAATTTGAATGGTAAA TTCCCATGAACATATATGGAAATGTCTTTATCCTACTTTCTCCAATAAAG NNNCGGCACCCCNNTTTTTTTTTTTATTAATTAAAAAAATAAATTTTTTATT CCCGTTTTAAAATTGGGTTCCCCGGGGTGAAGAATTTCATTTACACTTAT TATACCCCCACCCGAGGGGGGGCCCGAACCCCACTTTTGTTCCTT >Sequence 2920

TGGGCGATCTGGGGGCCAGGTTCGGGATGAGTATCGGCAGGACTACGATG GCTCTGTCAGTGACAACACTCCTTTGGCCTGTGAATTTGCTGAAGAACA TCACCTAAAGTCTGCACACGAGCCCATTTTTACCAAGATTTGATCAGTGT CTTTACTGAGCTGGAAGCCTCTGAAAGTTATTAAAGGACAGAATCCAAAA GAATGCCTTTAATTCTTGTCTGAGAATCTTGGCCATGTGTCAGATTATCA GAACAATTTTGTTACCAGGTCAGAAATTGTGTTCTTTGACAACAGATTGG ATCTGTAATGTTGATTAGTCTTTAGCCATAACCACTACACTTTTAGAAAG ACAGAAAAATGTAAGAATTTGTTTTTACCATAATGAGTCTTAAGTAGGTT CATGATCTACATTGCGGCCTGGGATTATTTTTTAATTTTAAGTTTGCAT GAGATAGCCTAATAAATGGAGGTGGGGCCAGGCATGGTGGCACACACGTG TAATCCCAACACTCTGGGAGGCTGACGAAGAAGGATAGCTTGAGGCCCAG AGTTTGAGACTAGACTGGGCAACATAGCAAGACCTCGTCTCACAAAGCAN AACAAAAACAACAAATGGAGTTGTGCTATGTTGATCGCTTTGCACAAAAT AGGAACAAGTGGTGGACAATTGATTTGTTTCTTTGAATTCTAACCTTAAA AGCATGCTTAGAGGTCAAGGACCTTCTGGGTAATTGTGCAAAAGCAATCT CCACAGAACAGACTGTTTCATGCTTCATACATANGA >Sequence 2921

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## Table 3

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TATTCTGGAAACAAAAGAGCATTTTTCAATTAAACTACTGAAAATTCCCA
NTTNAATATTTAAAAATAAAAGGTCCTTGGCCGGTTTGAACTAGGGATCC
CCGGGCTGAGGAATTAATTTAAGCTTTATGATC

>Sequence 2922

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>Sequence 2923

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>Sequence 2925

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>Sequence 2926

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#### Table 3

TACTCTCTCCCCGCGTACCT

>Sequence 2927

>Sequence 2928

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>Sequence 2929

>Sequence 2930

>Sequence 2931

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>Sequence 2932

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## Table 3

CCACGTACTACTAAGAGTGAGGTAGATATACTCTCCACATATACGTT GCGTTAACTATCTATTATGATATTACAATAAACGATGAGTTGATCTATTA ATAGTGTTTACT

>Sequence 2934

AGTACTTTTTTTTTTTTTTTTTTTTTTTTATTTNTAAAGGATACAGGGTCTTGCT CTCTTGCCCAGCCTGGACTGCAGTGACAGGTCACTGTANCCTCAAACTCC CGGGTTCAAGTGATCCTCTTACTTCAGTTTCCAAGTAGCTGATATTACAG GTATGCACCACCATGCCCAGTTAATTTTTAAATTTTTCTATTGCTGTCTG AAAAATAATCTTTTACTGGGAGGTGGCAAGAGACCCATTTCTTCAAAATT CCTGTATGGCTCATATTCTGTGTCAGGGATTGTGGGAAAGACAATTCCAG GGATAGATGAGCCCCCGAACTCATTTTTTTAACTTAAAACTTTTCATGCC ACATTTTTAAACAGGAAGTTAAAACCAGAAATAATCCCAACCAGAAATGT GCACAGCTCAAGATCACAATTGCTTGCAAGAAACAAGAAGTGACACGTTT GGAATATTCTCTCTTTTAAAAATGGCGCAATGCAATTTTTATCAAAGCAT TCATTTCACTACACCAAAGCAACAAGTACCTGCCCGGCGGCCTTTTTACC CAAATACAAATTCGATATACAACAAAAATTTCCTGTATGAAATATTTTTA CAATAAAAGAAACAACCATTTTTTAATATCTAATCAATTTAACTGGAATT TGATTAAAACCTACTTAAAATATTTTTTTTTATATCACTCTATATAAAGA AATTTTTAAATAATAAATTATAATTTATACCAAAACTAAAGATTCAAAA **AGTTACTTAATATAAACG** 

>Sequence 2935

>Sequence 2936

GGCGCAGTGGCTCACGCCTGTAATCCCAGCACTTTAGGAGGCCAAGGCGG GTGGATCAATTGAGGTTGGGAGTTCGCGACCAGCCTGACGGATATGGAGA AACCTTGTCTCTACTAAAAATACAAAATTAGCCAGGCCTGGTGGTGCACA CCTGTAATCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATCGCTGGAACC CAAGAGGCAGAAGTTGCGGTGAGCCAGATTGCACCA

>Sequence 2937

Page 603 of 685 of Table 3

### Table 3

>Sequence 2938

AGGTACGCGGGGAGACCTGACGCTGGGAGGAGATGCTGCCACCTAGGTTA CTTGTAGGACCCTATACGGCAACCTCCTTTGCCAGGAACTATTTATAAAC ATCCTGCAGGAAAATGAGTCTATATGTCAGAATAGACATATTGCCACGCT TGCCCAACAGTCGAATAAACATACTGAAGAGAAAAACATTAATAAAATGA CAACGGAAGTTAATCGGAAGTCAGCAATGTGATGGTGTTTTGGAGGTGGAG CCTTCAGAAGGTAATTAATGCCCTTGTAAGAAGAGGCCAGAGAGCTTGCG CACCTTCTTCCTGCCATGTGAGGAGCCAAGAAGCCGGCTGTCTGCAACCT GCAAGAGGACCCTCACTAGAAGCTAGCCATACTGGCATCCTCATCTTGGC TTTCCAACTTCCAGAACTGTGAGAAGTATATGTTTGTGGTTTAGTCAATG GCCTATGGTAATTTTTTATAGCAGTCCCAGCCAAGACAGTGCCTTAATT ACTACATACCATTTATATTATGATATAGGCTCCTTTCAGAAACCCATGTT CAAATAAGAGATAGGATACTGGAACCCATAACACCTTCACTAGTTTTTAA TGTACAAATATTGAGAAATAAGTTGGTATTAACTATCTCATGCAGAAAGG CAGAATCATGGTGCTTCAAATTGTTATAAATAATGGACAAATGAGAAACT TACTGGCCCGCCGCCTTTAAATAGGGAACCCCGGGCTGCGGGATCGT TTTAACTTTTCTT

>Sequence 2939

CGGCCGCCCGGGCAGGTACGCGGGGACAATTGGTTCATTTTTATAGGTGT TGACCGTTATGCCTATAAATAAGCCTCCTATAGACATACAGAAATCATAT CCTGTGGAATTAGAATATAAGACTTGGTAAAAGAGATTTCAAAGTATTTT ACTTAACTTGTATACTTGAAATCATTTAATCCAGACTGAAGTTGTAAAAG CCAGCCAGTGTTTTCAATATAGACTTCCATGTTTGACCATCTGAAAATGA AAAACACTAAAAACATCACATGCTGTTTAGGAGCTGGAAATTTTAATATT TGACTTCAAGTAGATGGTTTTTAACTCCTGAAATCGAACTACGTTTAAGT TTGTATGTTTATTACCTGTTTGAGCACTTAGGTGCAATTGTGGGAGCGGN GATGTCAAGTTCATTTATGTGACTCTTTGGCTCAACTTACATAATCTTTG TGAATTGTTGATAAAATGGAAAAAGTAGTATATTGTTATATAAGCTTCTG AGGTGTGTTTTGTTGTATAAGCCCTGGAGGTTAAAAAGTCATCCCTTATG TATAGTAGTTAAAGGCATAAAACTGTGACTTTTAGATATTCCACAGAACC CTTTAATTTAATCGGGTCATTTTTACTCTTCCCATGACATGAAACAGTTG TGGCGGGTAAAAACAACTGACCTTGTTTAATGGTAATGAACTACTTGTTT CAGGGG

>Sequence 2940

CCGGGCAGGTACGCGGGTAAACATGATTGAGCTAGAAGACAGTTTTACCA
TATGCATGCATTTTCTCTGAGTTATATTTTAAAATCTATACATTTCTCCT
AAATATGGAGGAAATCACTGGCATCAAATGCCAGTCTCAGACGGAAGACC
TAAAGCCCATTTCTGGCCTGGAGCTACTTGGCTTTGTGACCTATGGTGAG
GCATAAGTGCTCTGAGTTTGTGTTGCCTCTTTTGTAAAATGAGGGTTTGA
CTTAATCAGTGATTTTCATAGCTTAAAATTTTTTTTGAAGAACAGAACTTT
TTTTAAAAAACAGTTAGATGCAACCATATTATATAAAAACAGAACAGATACA
AGTAGAGCTAACTTGC

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## Table 3

>Sequence 2941

ATATTGCACCTTTGGACATCGGTGGTGCTGACCAGGAATTCTTTGTGGAC ATTGGCCCAGTCTGTTTCAAATAAATGAACTCAATCTAAATTAAAAAAGA AAGAAATTTGAAAAAACTTTCTCTTTTGCCATTTCTTCTTCTTCTTTTTTA ACTGAAAGCTGAATCCTTCCATTTCTTCTGCACATCTACTTGCTTAAATT GTGGGCAAAAGAAAAAAGAAGAATGATCAGAGCATTGTGCAATACAGT ACTCTTACACCTGTTATGGAAAATGTCAACCTTTGTAAGAAAACCAAAAT AAAAATTGAAAAATAAAAACCATAAACATTTGCGCCACTTGTGGCTTTTG AATATCTTCCACAGAGGGAAGTTTAAAACCCAAACTTGCAAAGGTTTAAA CTACCTCAGAACACTTTCCCATGAGTGTGATCCACATTGTTAGGTGCTGA AGGTGCTAATTAATAGTATTTCAGATACTTGGAGAATGTTGATGGTGCTA TTTTTAAAAAATTTGGATTAGCATTCATATTTTCCATCTTAATTCCAAAT AAAAGTATGCAAATATTTGCCCCAAGTTGGCCTTTTTTCAGATTCAGCAT **TGGTTTTTGCCAATCTCAATTTAT** 

>Sequence 3627

AGGTACGCGGGGAGAGCTTTTGGTTTGCTGAGGTTTGTCAGATTTTCCAG CTCAGGGCCCAGCCAGCTGGCAGGAAGCAGGACAGAGGTCACTTGAATTC AAAGTCCAGTGAGTTGCAAGCCTAATGCTCACCTGCAGAGACAGAATTCC TGAGTGAACGAACAGAGCAGCTCCTCTTCCATCTCCAGAAATGACCTCCA CCTTCAACCCCGAGAATGTAAACTGTCCAAGCAAGAAGGGCAAAACTAT GGCTTCTTCCTGCGAATTGAGAAGGACACCGAGGGCCACCTGGTCCGGGT GGTTGAGAAGTGTAGCCCAGCAGAGAAGGCTGGCCTTCAAGATGGAGACA GAGTTCTTAGGATCAATGGTGTCTTTGTGGACAAAGAAGAACATATGCAG GTTGTGGATCTGGTCAGAAAGAGTGGGAATTCAGTGACTTTACTAGTTCT GGATGGGGATTCCTATGAGAAAGCAGTGAAAACACGGGTGGACTTGAAAG AGTTGGGTCAAAGTCAGAAGGAGCAAGGTTTGAGTGATAATATACTTTCC CCTGTGATGAATGAGGTGTGCAAACTTGGACCCAGCCCCGGCTCTGCTAT CTCGTGAAGGGAAGAGGCGGCTATGGCTTTCTCTGAAAACTGTCCAAGGT GAGAAGTCAGGAAACCGTGTCATGTTCCTGCTGGTGGACCAAAAAACTGA CAAGCCGTATGTTAGCCGAAGATCCAATTCAAAGAAAACCGGCAGTTTGA **ACTGGTCCCCA** 

>Sequence 3628

TCATTGAGTCACGCGAAGACGTGTTTTGCGACCCG

>Sequence 3629

>Sequence 3630

AGGTACGCGGGGGAAAGCTGATATTGCAATTGCTCCATTAACTATTACC
CTGGTGGGAAGAAGAGGTGATTGACTTTTCAAGGCCCTTCATGAGCCTCG
GGATATCTATCATGATCAAGAAGCCTCAGAAGTCCAAACCAGAGTGTTTT
CCTTTCTTGATCCTTTAGCCTATGAGATCTGGATGTGCATTGTTTTTTGCC
TACATTGGGGTCAGTGTAGTTTTATTCCTGGTCAGCAGAATTTACCCCCT
ACGAGTGGCACACTGAGGAAGTTTGAAGATTGAAGAAACAAAGTAG
TGAATCAACTAATGAATTGGGGATTTTAATAGTCTTTGTNTTTCCTGGGT
GCCCTTATGCNGCAGGATGCGATATTTCGCCAAGATCCTTCTCTGGCGCA
TTGTGGAGGTGTGTGGTGGTTCTTTACCCTGATCATAATCTCCTCCTACA
CGGCTAACTTTAGCTGCCTTCTGACTGTAGAGAGGATGGTGTCTCCCATC

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## Table 3

GAAAGTGCTGAGGATCTTTCTAAGCAAACAGAAAATGCTTATGGAACAAT AGACTCTGGCTCCACTAAAGAGTTTTTCAGGAGATCTAAAATGCAGTGTT TGATAAAATGTGGACCTACATGCGGAGTGCGGAGCCCTCTGTGTTTGTGA AGACTA

>Sequence 3631

AGGTACAGGTGTCTTTTGATTGAATGATTTATTTTCCTTTGGGTAGATA CCCAGTAGTGAGATTGCTAGGTTGATTGTTCATTTTTAATTCTTT GAGAAATCTCTATTCTGTTTTCCATAGGGGTTGAACTAATTTGCATTCCC ACCAACAGAGTATAAGTGTTCCCTTTTCTCTGCATCCTTGCCAACGTCTA TTATTTTATGACTTTCATAATAATAGCCATTCTGACTGGTATGAGATGGT ATCTCATTGTAGTTTTAATTTGCATTTCTCTGATGACTAGTGATGTGGAG CTTTTTTAAAGTTTGCTGGGCACTTTTGTGTCTTCCCAAAGCATTTTTA AATCTCTAGAATGATCTCACGTAATTGCAGTGCTATATTATTTGGAGTAG AAATTTCTAAAGGCGAATAATGCTCCTTGGACTTAAAGAATGTTTGCTCT AAATTAGACAGTATATAAAACCGAAAATGCTTTCCTGTTCAAAAGCATGA AACACTATAATCTCCATGCACCATGAAGATATCTNTACACATTTCTTCTC GGGGGCTCTGGTTTTTGTTCTGATGTTTGCCATTACAGGTGAAGCAACAC TGTGTAACAACAATTTCCTCAACGCTATAAAATGGTAAGCCACACGGCAG TTTGCTTGTCATAGGAAAGGTTAGAAAAGATCTGCTGGGAAATTTCACAT TTTCACAGTTCTGGTCTTCTCTGCAAATAATTAATTTTCTTTTAATGGAT CCTAATGAATATTAATCATGCTGTCCAGGCAAACTTCTCTGTGGGGCCCT

>Sequence 3632

AGGTACGCGGGGGCTGTAGGCCCGGGTGGTTGGAATTGACCGCTACCCCCGCAAAGTGACAGCTGCCATGGGCAAGAAGAAGATCGCCAAGAGATCAAAGATCATTTTGTGAAAGTGTATAACTACAATCACCTAATGCCCACAAGGTACCTGCCCG

>Sequence 3633

CTCTCACTGTCACCTGGGCTAGAGTGCAATGGTGCTATCTCTGCTCACTG CAACCTGCGCCTCCCAGGTTCAAGTGATTCTCCGGCCTAGCCTCCTGAGC AGCTGGGATTACAGGCGCCTGCCACCACCCTGGCTAATTTTTTGTATTT TTAGTTAGAGACGGGGTTTCACTACGTTGGCCAGGCTGGTCTCGAACTCC TGACCTCATGATCTGCCCACCTCTGCCTCCCAAAGTGCTGGGATTACAGG TGTGAGCCCTGTGCCCAGCCTTTTTTTATCTTTTAAAAGTAGCCTGTTC CTTCTTTTAAACTAACTCTCATGTCATACAACTAAAAGAAATAAAGTGTC TAAAAATATCTTTCAATCTATATAATTTAAAGGTGGTAGGCTTTTTATA TTTTGTTTGATTAAGGAAATATTAATAAGCCAATTTTGAAAATTGGTTAA TTAGTAAACTCAGAGTCATAATTCTCTCCAGCACTTCAAACATTATAATT CTTTACCTCTTTAATTTCATATAAAATCTTAAGTCAAGAAGAAAGCAAAG TTCAGTATTTGAAAAATAATCTCTTAACTTCTGACCAAATTTTAAGGTGG TATTTCCAAATCAAACATATCTCCAAACACCACAAACTCCCATCAATTTT TTTCTGGGCTTTTAAACCGCCCAATTCCGCCCCACCCTGACAGTTCGGGG CTATCTACCACAGAAGCCTTCCTGAATTCACTCAATAAAAAACCCCCCAAA TCTCTTAATTTATAAAGGGCACAATGCCCTTTTTTTAAGGTAAAGAAAAC CTTTTTTACCTCCCCCTTAATGTGTATATCTT

>Sequence 3634

>Sequence 3635

GCTAAGGACTCCTCCAGCCTCAGCCTCTCGAAGTGCTGGGATCACAGGTG TGAGCCAACGCACCTGGCCACACTTTGTTAATTTTTGAGATGTCTGCCAA

> Page 606 of 685 of Table 3

## Table 3

>Sequence 3636

>Sequence 3637

>Sequence 3638

>Sequence 3639

>Sequence 3640

CCGGGCAGGTACTGTCCAACTGGATGCTGCCCTGGTGGCTGAAGGCACAC
TTCATGATGCTGTCCAGGGTCATCAGGGAGACATGTTGAAAGAGCTCCAG
ACGTGAGTTTTGGGCAATGTGTTCCTCCCATTTGTTCGGCATCATCCGAA
CACTCTCAGACATCATGGTGATGAATATTTTCAGAATGCTGATGTTGAAG
CCAGGTTTCACAATCTGGCGTGCTTTTTCCATTTAGAACCATCCAGGGT
CACAAGTCCTCGACCAACCCAGGATTCAAGGATTTTTTGGCTAACAGCAC
TTTTGGGATCTTGTCTTTTTTAGAAGAATCTTGGCATAGTCATGG
ACACTGAAGAACATCGTAAAGGGTCCAACCCACAAGGGAACAGCACATGG
GTATTTT

>Sequence 3641

> Page 607 of 685 of Table 3

# Table 3

TCTCTTGGAGGTAATGCAAACTAGATCCTAAACTGTGGAAACCAGTCTGA AGATTTCTGGAAAAAAAAAGGATGGAAGGCAGAGCTATGCTTTGACCCAG CAATCCTACCCCATGCATCTACCCCAGGGAAAAACACATGCGTCTATCAA AAAGACACATGACACTCACACGTCCACGGGAGTGTTACTGACAGGAATAA AGATGTGGAACTGATCTAGATGCCCACGAACAGAAAACTGGATTTTTAAA AATGTGGTTCCTATACATCACAGAATGCTAAAAAAGCCACTAAGGAAAATC AAACACAGAAG

>Sequence 3642

>Sequence 3643

CCGGGCAGGTACTTTTAGTAGAGACGGGGTTTCACCGTGTTAGCCAGGAT
GGTCTTGATCTCCTGACCTTATGATCCGCCTCGGCCTCCAAAGTGCTGG
GATTACAGGCGTGAGCCACCATGCCCGGCTGCTTAAGTTTCTTAAATACA
GAAAGGCTATGCTGATACAGTGTTTTTTGCCCTTTAATTGTTATTATTTC
TTAATTTAAAAAGAAACCTAGGGCTTAGATAGTCCTATCTTCTATTTGGA
TGTCAGCAAGGTTAAAAAGTGCAATGTCAGGAGTATGTAGCTATAGGTGG
CCTGTGGCATTTGCTTACAGAAACGGGCAGAAGGATGCCGCATGCACCAG
GAGGCACTTNGTCTAGAACNNACACANNNCAATACAAAAGCTGCTGAGAA
GGAGGCANGGGAAACAAACAACAACAACATCTTTCTCCTTAGCACCCCGC
ACATCCTGTATGGTTAGAACCATCTATTGCTAATAAACAATACCCATACTA
TTTTATNTAATCCAATGTAAATCGAGTGATAAAATTGACACAGTGGTAA
TACTGGTTGTGTTAGTGCNATCNGAGCCTATCATTTCGGCTCGTTAGTCT
ACTGGGGAGGCACTCAGCACTCTGTAAGTAGGATCACTGCTCTGTGAGG
>Sequence 3644

>Sequence 3645

> Page 608 of 685 of Table 3

### Table 3

>Sequence 3647

CCGGGCAGGTACTCGAAGTGGAAGGACTTTCATTTTGAGAAGATACCATT TGATCCAGCAGAAATGTCCAAATGATATCAGGTCCTCAATCTTCAGCTAC AGGGAATGAGTAACTTTGAGTGGAGAAGAAACAAACATAGTGGGTATAAT CATGGATCGCTTGTACTCCTCAGCAGAGCTGGAGGACAGCAAGGCCAGGA CCAGCCCCAGCATGCAGAGCGCTCTGGCAGCCATGACCACCGTGGGCTCC GGGACGCAGCTCAGGACTCCCCGCGTACCT

>Sequence 3648

TTTTAGGGA

>Sequence 3649

CCGGGCAGGTACCTGTCTCTCTCAAACTAGATGATAAGTGGCCTCAGGG CAGGGACTACATACTCCTGAGAGCTGCTTGAGCTCGAGGTGTTTATTATC

>Sequence 3650

>Sequence 3651

>Sequence 3652

CCGGGCAGGTACGCTGGCTTGCTGATCGTCTTATTGGGGTGTCAACAGAT ATGACTCTGGATGGAATCACCTCCCAGCTGAACTTTTCCACCTGGAGTC CTTGGGAATACCGGACGTGATCTTCTTTTATAGGTCCAATGATGTGACCC AGTCCTGCAGTTCTGGGAGATCAACCACCATCCGCGTCAGGTGCAGTCCA CAGAAAACTGTCCCTGGAAGTTTGCTGCTGCCAGGAACGTGCTCAGATGG GACCTGTGATGGCTGCAACTTCCACTTCCTGTGGGAGAGCGCGGCTGCTT GCCCGCTCTGCTCAGTGGCTGACTACCATGCTATCGTCAGCAGCTGTTG GCTGGGATCCAGAAGACTACTTACGTGTGGCGAGAAC

>Sequence 3654

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## Table 3

>Sequence 3655

>Sequence 3656

CACGCTGGTTTTGCATCTTTTGGAGACGCTCGTTTCCTTCGCGCTTCTCC
TCGGCCAATTCGCGGAAGAAGTGGCTCACGCCTTCCAGAGCCACATCATC
GCGGTCGAAATAGAAGCCCAGAGAGAGAGGTAGGTGTAGGAGGCCTGCAGGT
ACCACTACATCATTGCAAATCTGGGATTTACTGATGGAGACCTATTAAAA
ATCCAGTTTGGAGGTGCAAATGTCTCTGGATTTCAGATAGTGGACTATGA
TGATTCGTTGGTATCTAAATTTATAGAAAGATGGTCAACACTGGAAGAA
AAGAATACCCTGGAGCTCACACAACAACAATTAAGTATACTTCTGCTCTG
ACCTATGATGCCGTTCAAGTGATGACTGAAGCCTTCCGCAACCTAAGGAA
GCC

>Sequence 3658

AGGTACGCGGGGCTCTCTTCCACAAGCACAACCCTTCTTCAGACGTCCAT ATACACTTCTCCCAAAATCCTGTGCTTAACACACTTGTTACTGAGCACACA GGCGTGCTGGGGCAAGCGACGCCTGGGAATATGAAGCGAACGCCACACAC TAGAACGCGCCCTGGGAGCTGGCCTCCGGTGGGGGACGCAGGTGTTGAAG ACATAACCGCATGACCGAGAAACCTCAGTTTTGCTCTGAAGGCCTTCAAC TGCC

>Sequence 3659

>Sequence 3661

TGAATATTTTTTCACTCTAATACTCAATATGTCTAATAATACACTATG

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### Table 3

TTATACTATTTATAGATTGATCACATATTCTATAACTTATACTAATACAG TTTATCTAGTATATTATTTATCTATTTTTAATCTTTATTTTAA TATTAANTTAGGTCGTACTCTCCTCACATTATATCGACTACACTTATCAG GTGTCAGATATATGTGTAGACCTACTCACTACGTCTGGTTGAGCTGTGCT CGTATCCGTGGACTAGTGTATCCTCTCCTAATATCAATATTTATCATGTC TGTATTTCATGTAATTCGATACATTCGTCATAATAGTATATCATTAGCGT ACAAGAACGAATACTAATAATAGAGAACTGTGGTGTAATTCCGATAGCTT TTTACTCTTTAGTTTTGCATAGACTTATGTTATAAACACAACTTTTTGGT TTTGCCAAATCCTTTTTAATCGAACTTTATACTTTCTTTTTTGTCGGTTAC TCAACGGGTATACTCGTCTAATACCATATATATTATTCCTCGACTAAATC TATTCTAACTCCTATTACAATAGTAAATGAACCTAGGTTTATGAGGATAT TTTTTAAACGAAGATATTNGTCATTTCTTCCACTAAAACACCTTAATATC TTTTCTTACTTACAAGAAATTGAAGAGGTTATGCTTGTGTTTGGATACCC TTTCAAGCTATTAATATCGATAAAAACCTTTTCCCTTCATTTCCCTTAAA GTCCAATTCTTTCCCTGGCACACTTATTACTTTCTTTTCTCTTCCCCCAC AATTTCTTTTTCGGACTACGGCCAAGTTTTCTTAGATAATAATTGGGAA ACTTGGGAAGACTCCTATTGGTCTTTTTCCTACAACCTTGGGCCAAGGTT GATTTTGAAAACTTTTTTTGAGGAGGAATGG

>Sequence 3662

>Sequence 3663

>Sequence 3664

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#### Table 3

AAAAACTCTGTCTTTGGGGG

>Sequence 3666

>Sequence 3667

>Sequence 3668

>Sequence 3669

>Sequence 3670

CCGGGCAGGTACGCAAGATAGTTCAGAGATGAGACCTCTGGTTGTATTCC GGTTCTACAATTCAGAGGCTTCATATCCCTGCTGGAGTATTACATGTTTA TTCAGGATGGACCACTTTTCTTAGCAACAGTTTCTAAACCTTTGCCAGGT CTGGGAAGTCTGGCAGGAGAGTTTCTAAGAACCAATCATTCCTGCACAC ACTTCTTGAAGATAATATACATTATTCCCTAGTTATCTCTTCCTAGGTTT TTGTAGGCTCATTTCAATATTACAACAATCTTTATTGGAAAACCCCAAGT ATTTTGTCTTGAAAAATCAGCAATCCAGGTATTAAAAATAGCATGGAATG CCCAATTTTACTTTGATAATTACATGGTAGTCAGTTTCCGCTCCTGGCTA AAGCCTTGGATTTTCTTCTGGGCAGTTCCTAAAGGCACAGGTGGCATGGA AGAAATCATTCCATTTTCATCTCCTNCCCTTATTGATTGGGGTCTGGTAC CCAAAGAGTCATTAGGCCCTTGGGATACCTTCTTGAACTGATCTTCTAGA ACGCAAGTCTAGGTTTGCCCAGGAAAGAAAAATTAACGCATGCACACTTT TGCCCATCTTTACAAGGGAAAGAACCACTTGGCCTTAAGAATCCATAACC TCTCATGCCTTCTTTGGCTTTTCCTTTAGTTTCCATAATCCTTCTTGAAC CTCCATTCCTTGAAATCTTAATAAA

> Page 612 of 685 of Table 3

## Table 3

>Sequence 3671

AGCGGGCCCCGGGCAGGTACAGGGCTTGAGAGCAGAGCTGCCCATGTCT GCTTTCCCTCTGAACCCTGACAGCAAACTCTTCTGAAGGAGCTTTTCACT CTATCAAGGTATGATAAAACTTGAAAAGAGATGGCTGGATTGAGTGCGGC GCGGGGGTGGGTATCAGAGGTAGAGAAGTTCCAAGGTGGCCCCATAACTT TCCTATATCCTTGAAGAATCGTTTTTCATTTGCAGAATAAAAAAGGAAGA AAGTCTACATATCTGAAATGCTCTTCGATAGACCAGCAGATGGTGGCCTA ATCAGTATGGCCAAGAACCAAGTGGGACTGCCAATATCTCACTGGATGCC CACGGAGGGCTCCACGTCTGGAACAAGGTGGAATGATGTCCTCGGCCGCT TTTTG

>Sequence 3672

AGGGACTTATTTTTTTTTTTTTTTTTTTTTTTTTTTTGCCCTCCAGATTCTCAGTCC
TTTGGTGATCACTTAACTGGACAATCAGAAATGAATGAAATCCACTTTTC
CAAACAAGACATACCAAGAGAAGCCCGAGCAGCTCACCTGGGTCATTGGC
TAACACAGACCCCGCGTACCTGCCCG

>Sequence 3673

>Sequence 3675

AGGTACACAGCAGTGCTCACCGAGCGAAAGATGAGCAGGGAGGTGAGATT
GACGTAGCGCATCAGCGTCCTTCTAAGCAGGCGCCCGTGCTCGCTTC
CGTGAACACTGCTAGAGATGAGGAACATTAGCCTGTCTGGCCAGGGCAAA
TTCACAAACTGGTTCCACCATCGGTTCACTACCAGAGTAACATAAAACCC
TATTTATTTGGTTTGTAGTCTCCGACAGGAAAGAGAATCTTCAAATTTCT
GGCTCCCCCGAAGAGGTGCCTTCAGGTCGGTGCTGCACGCCCGGTGTCAC
CCTTCGCTCGTGCACAGTCAGATTTTCTTTCTGTTCTCTGGCCACTGAGA
GGACCCAAAGTGTGACAAGAACAGAGGTTAAATGTTTTTTCACTTGTAGA
G

>Sequence 3676

>Sequence 3677

AGGTACATGCGGTAGTGACGGGTTACAGTCCCGTGGGCAGCCTCTGCTTC
TACTGTCTTGCCATCTGGACAAACCAGCACGCTGGTCATCATGCCGAGAG
AGCCATACCCTTGGGCCACAGAGTCCGACTGCACGTCACCATCATAGTTT
TTACAGGCCCAGATGAAGCCTCCCTCTGATTTCATAGCTTGGGCCACCAT

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# Table 3

GTCGTCGATGAGCCTATGCTCATACCAGATCTTTTGAGCTTCAAACTGGG **ACTTGTACCTGCCCG** 

>Sequence 3678

CCGCCCGGGCAGGTACAATAAGCACACACCCAGAAGAGCTGAAGGCTGAA GACAGAGACGATATGGCAAGAGGCAGTGGCCTGGAATGGGGACTGACCAC CCTGCAGAAGTTCAGCCAGGTAGATGTGGGGCAGGGGAACGCTGATGGTG GTCTCAGGGGGAAAACTCAGGACCTGCACATAAGTGGATGACCGGAAACA ACAATAAACATTGTGAGATCTGGAAACCCTTTTCTCCAACTGGCTGAAGT GGACCCGGGCTCCTGGAAGTAGTCCTAGTGAGGGAGGCAAGTGTGGGTCT TCTATATATACATCCAGGTGAGGGGGGAATTCACATTCAGCAGTCTCAAG AGCGACTGTTAGCTTCACACACCTTCTCATGGCCCCCG

>Sequence 3679

AGGTACGCGGGGACTGTTGCGACTGGCATCCGCATCCGGCAGATGTAGAT GGAACCAAAGTCCAGAAGTTACGCGTCACCCTTGCTCTACAGCCAAACAT GCAGGACTCTAGTAACCCGCGAAATGATGGGATAGCGTTGCAAATCCTTA AAAGAGTCTTAACGAAATCCTGGCTGACATTGACTTCTCCACTGCAACCA TCGAGTTCATTGTCTCCTAAACCTTGCCATGGAGGCCTGTGGCACCTGAG CCAGCCATTATCATCACCAGCACTTCCATGAGCTACAAGCTGGACCCACT GCAGTCCTCCTGACACACTGAAATCAGAGCCTGCACACAGAGCAGCAGAT GCTTCAATGTAAAGGTCATTTCCAGGTCCTTGACG

AGGTACTTTTTTTTTTTTTTTTTTTTTGCAAATTTACACAGTTTTCTT AGGAATGCTCTTTCTTTTTTTTCTCTTTGGACTCTACATTCCTGTAGCT CCTATTCTTCAAGGGCACAGGGGCTTACTTAAACATAAAATTTTACAACT TAACTGGAAGGGTGCCCTGCTTGCAAATGGAAAACTGCCACAGAGCAGAC TTAACTGCAGCAAGCAGGTGACAGTAGCAAGGAACCAGGATCCAAAATTA TGATTTTTTGTGTGCTACTGAAGTAAAAGAATTTAAGAAGGTTTTACTCA GGGTCATAGGCTGGGTTGGAAGAATGGGAAAAGGAAATCAGTAGTATCTA TATCTAATTATGGTGACAGAATTTCACAGACATCTATTACCTAC >Sequence 3681

AGGTACCCTGGACTCATACCTGAAAGCAGTGTTCAACCTTAGCAAAATCT CCAACCAGCGCATGAACAATTTTCTACATCACAACGACCTGGTTTTCAAA TTCAGCTCTCAAGGCCAAATCTTTTCTAAATTTAACCAAGAACTTCATCA TTCAAAAAAAATTTTTTTAAAAAAAGGCGGGCGGGTTTTTTTGAAAAAA **GGGGGGGGGTTTTT** 

>Sequence 3682

AGGTACGCGGGTGTGCACCCACAGTGAGCTTCTGAACATTTCTTCTCAGA CTAAGCTCTTACACACAGTTGCAGTTGAAAGAAAGAATTGCTTGACATGG CCACAGGAGCAGCTTCCTGCACACATGACTGTCAACGCAAACTCAT GTTACTGAGGGCAGACACATGTTTGCAAAGAGACTCAGGAGCCAAACAAG TCACAACTAAAATGTGCTTTTTGCCCAAAATTTATÁCTCCAATTAGGTAA AGATCTTTCCCCTTGCTTCCCAAGAAGAAAAGTGGAAGAAGCATTGA ATTACCTTCACATTGGAAAAACTTTGAAAGTCAAGTGGAAAATGGAAGGG CCTCAACCAAATTATTTTTGTTGCCATGGGGTTTAAAAGGTTTTTCCTTT GAAAAATTAAATTTCAAGGGTTTTTTGTCTTTTTGGGGTTG >Sequence 3683

**GTANATGGCCGCGAATACACT** 

>Sequence 3684

CCGGGCAGGTACAGATGGGGTTTCACCATGTTGGCCAGGCTGGTCTTGAA CTCCTGACCTCAGATGATCCACCCGCCTCAGCCTCTCAAAGTGTTGAGAT TACAGGCTTGAGCCATTGCGCCAGCCCTACCTTTGTTTTCTTAATAGTAG

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## Table 3

AGGTACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAAATCTTAAATGTGCTCTAC
TAAGTGAAAAACCCATATACATGATTCATGGGCTACATATCACATGATTC
CATTCATATGATACTTTGGAAAAATTAAAACTATAGGAATGAACAGACTA
GGGCCGGGGTGTCCAATCTTTTGGCTTCCCTGGGCCACACTGGAAGAAGA
ATTGTGCCTTGGGCCACACATAAAATATACTAACACTAACAATAGCTCTT
GAGCAAAAAAAGTCCATGTATAAATCTCATAAGGTGTTAAGAAAGTTTAC
GAATTTGTGTTGGGCCACATTCAAAGCCATCCTGGGCCGCATGCAGCCCA
CGGGCTGTGGGTTGGACAAGCTTGGACTAGCAGTC

>Sequence 3686

>Sequence 3687

>Sequence 3688

>Sequence 3690

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#### Table 3

>Sequence 3691

>Sequence 3692

CCGGGCAGGTACCCGGGCGTGTGAGGTGTCAGTCTGCCCCTACTTGGGGG TGCCTCCCAGTTAGGCTACTCGAGGGTCTGGGACCCACTTGAGGAGGCAG TCTGTCCGTTCTCAGATCTCCAGCTGCGTGCTGGGTGCTGGGAGAACCAC TACTCTCCCGCGTACCT

>Sequence 3693

>Sequence 3694

>Sequence 3695

CCGGGCAGGTACGCGGGGAGCATATAAAATGCAGTTCTGATCCTGTCACC
TCTCTGCTTAAAACTCTTCAGAGGTTCACCATCGCTTCCAGAAAAAGATC
AATACTCCTGACGTGGCAACCTGTCGAGACTCAGGACCGCTAGGAAATCA
GCTCTTGTTACCCCTTTATCCATTACACTACGATCCAGCTGGGTTTAGGC
ATCACTTCCTCTGAGCAATCCTCCCTGATGTCATGAGGCAGTGCTGAGTG
CCTTCTCTGGACCCTCTGTTTACTTGCCTGTTAAATCCTGAACATCTGGA
AGGGAGTCGTGTTCAGCAACATATCTACGCCTTGCAGCACGGTGCCTGC
CTGCAGCTGGTGTCCGTAAACAGCTGCTGACTGACGGGATGCATCGCCA
ATTCTAGATTTGAGTCAATTCTAGAGACCACCATGGTG
>Sequence 3697

AGGTACAGAGTGGGATGGTCAGGACCTGGGCCATTGCAACCAAAATGGGG ACTTCCTGGGTAGGGAGGTCACTCCCTCTACTCACTGAGCTAGGATTAGG

> Page 616 of 685 of Table 3

#### Table 3

GAGGGTTATTGCCCCAACCATTGCAATGGGAGGTGGAGGGACAGGCTCAG CCTCCTCATTGTCTAAATGAGGCCTAAATGTGTGAAGTGCGATTTCTGCT TTTGTGTACCTGCCCG

>Sequence 3698

AGGTACGCGGGATTTATAAACATCCTGCAGGAAAATGATTCTATATGTCA GAATACACATTTCCCACCTTGCCCAACAGTAGAAAAACATAAGAAGAGAA AAACATTAAAAAATGACAAGGAAGTTAATGGAAGCAATGCGATGGTGTTT GGAGGTGGAGCCTTCAAAAAGGGAAATAAATGCCCTTGTAAGAAGAGGCCA GAGAGCTTGCGACCTTCTTCCTGCCATGTGAGGAGCCAAGAAGCCGGCT GTCTGCAACCTGCAAGAGGACCCTCACTAGAAGCTAGCCATACTGGCATC CTCATCTTGGCTTTCCAACTTCCAGAACTGTGAGAAGTATATGTTTGTGG TTTAGTCAATGGTCTATGGTAATTTTTTTATAGCAGTCCCAGCCAAGACA GTGCCTCATTTACTACATACCATTTATATTATTAT

>Sequence 3699

>Sequence 3700

>Sequence 3702

AGGTACTTAACTAGGGTTAGCCGAGGTCAGGAGGGTGGATGCCTTATTAT.
GGGATTAGTGCCCTTCTAAGAGGGACAGTAGAGGGCTTGTTCATGCTCTC
TCTCTCCATGCACAAGAAAGAGCACACAGTGAGAAGGAAAGAGGCCCTCA
CCAGAACCTGACCATGCTGGCACCGTGATTGCAGACTTCCAGCCTCCAGG
ATTGTGAGAAGATAAATATCTGTGGTTTAAGTCACCAAGTCTGTGGTGTG
TTTTATGGCAGCACAAGGTAACCCAGATGATGCTTCTCACCACTGGGTGG
TCCAGCCTTTCATGGAAGCTGTCAGCTCCTCAGCCTTTGCAAAAAATGCTT
GCTGGTCACTCTCTTTGGTCCTCTCAGACGCCTTTCTTAGTGGTGCCTCT
ACCAGGCCCTTGACTTCATCCTTTTCT

>Sequence 3703

AGGTACCTCAGCACAGCACAGCCACGCTACAAAAACGTGGCCAGACTCTT GTTTACGTCAGTCCCTGACCACATTTCTAGTCAGTGGGTGAAGTCTTTCA ACCAGGGTCTCTGGCTACCTTGACTGTTGTCTGGCTGACAGAGGTCT

> Page 617 of 685 of Table 3

# Table 3

>Sequence 3704

>Sequence 3705

>Sequence 3706

>Sequence 3707

>Sequence 3709

CCGGGCAGGTACGCGGGGGTGGCTGCATGCCAGCCAGACACCCAGTCTTG CAAGACTGTCATTGAAAATCTCCGTTTTGCTGTTCTCCGGGTCTCTGCGT CCAGTCTTTGTGTTTTGGACGGACCTGCCGGGCCATCTTTCTGCAAGAAGA TAAAGGAAGACCAGGAGTGCCTGCCGAACTCCTATGGAGGAAGTCTAGGA GAGGAAGGGGACAGGGAAGATGGTGTCTGCAAACCAGGAAGCAGCCT TGCCAGACACAGGATTGGCCACAACCTTGACCCCAGACTTCCAGCCTCCA

Page 618 of 685 of Table 3

#### Table 3

GAACTCTCCTACTGCACTGAGAAGCACGTGTTCTCCATTTCCCTGGGGGA GACCATTGTATTGGGCAGTTTGGAACAAAACACCATGGACTGGAGGCTT ACACAACAGAAATTT

>Sequence 3710

AGGTACTGGGCTGTGGCACAGCCTTCGAGACAACACGGGTGTATCTCTGA TCCTGCCCTACCTAGGCTTCAAGGGGCTTCTGTCTGGAGAAATGCCCTCA AAGGGTAACCAGTAGGTGTGGCATTGAATTGGCCAGTGTTAGCATCTACA GCCATCACCGAGATGAGTTTGCCTGCCCGAGGGCCCCCTAAGGTTATAGA CGGTATCAGCAGGAGGCCGTCCCGCTGGTTTTCTAGGAGAGCCCACAGG AGGAAGGGAGCCTCTTCAGGGGCACTGGAATCTTTTGTGCCAGGGGCTTC TTTTCATCAGAGCCGGGGAGTACCTGCCCG

>Sequence 3711

AGGTACAGGGTAAACAGGAGGATCCTTGCTCTCACGGAGCTTACATTCTA
GCAGGAGGACAATATTAATGTTTATAGGAAAATGATGAGTTTATGACAAA
GGAAGTAGATAGTGTTTTACAAGAGCATAGAGTAGGGAAGCTAATCCAGC
ACAGGGAGGTCACAGAGACATCCCTAAGGAAGTGGAGTTTAAACTGAGAG
AAGCAAGTGCTTAAACTGAAGGATGTGTTGAAGAAGAAGGGAGAGTAGAA
CAATTTGGGCAGAGGGAACCTTATAGACCCTAAGGTGGGAAGGTTCAAAG
AACTGAAAGAGAGCTAGAACAGCTGGAGCCGTTCTCCGGTGTAAAGAGGA
GTCAAAGAGATAAGATTAAAGATGTGAAGATTAAGATCTTGGCGGCATTC
AGGGATTGGCACTTCTACAAGAAATCAC

>Sequence 3712

>Sequence 3713

>Sequence 3714

>Sequence 3715

CACGCTGGTTTTGCATCTTCAGGAGACGCTCGTAGCCCTCGCGCTTCTCC
TCGGCCAATTCGCGGAAGAAGTGGCTCACGCCTTCCAGAGCCACATCATC
GCGGTCGAAATAGAAGCCCAGAGAGAGGTAGGTGTAGGAGGCCTGCAGGT
ACCACTACATCATTGCAAATCTGGGATTTACTGATGGAGACCTATTAAAA

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## Table 3

ATCCAGTTTGGAGGTGCAAATGTCTCTGGATTTCAGATAGTGGACTATGA TGATTCGTTGGTATCTAAATTTATAGAAAGATGGTCAACACTGGAAGAAA AAGAATACCCTGGAGCTCACACAACAACAATTAAGTATACTTCTGCTCTG ACCTATGATGCCGTTCAAGTGATGACTGAAGCCTTCCGCAACCTAAGGAA GCAAAGAATTGAAATCTCCCGAAGGGGGAA

>Sequence 3716

AGGTACGCGGGCTCTTGATGCATAAAAACAGCTGGGCTCCCTTGGAGAC
AGAGCGCCATGGGAAACCGGGTCTGCTGCGGAGGAAGCTGGAGCTGCCA
TCAACTTTCCAGAAGAAAAAGAAAACAGGAAGCCAAACAAGACGGACACT
GAAGCCGCAGCCACAACAGCTGCAGCAGAATCTCCCAAAGGGCCATGAAA
CAACAGGACATACGTATGAACGGGTGTTACAGCAGCAAGGGTCTCAAGAG
AGGAGTCCAGGCCTCATGTCGGAAGACAGCAACTTACATTATGCTGACAT
TCAAGTGTGCAGCCGTCCCCATGCCCGGGAAGTGAAACACGTGCATTTAG
AAAACGCTACAGAGTATGCGACCCTTCGCTTCCCCCAGGCCACACCTCGC
TATGACAGCAAGAACAGGGACCCTGGTGTGAGCGCTTGG
>Sequence 3717

AGGTACGCTGGGAAGCGTTTACTTTGAAAAAATTAGATTGTTCAAAGCAG GCCCGAGCCGCCTGGATACCGCAGCTAGGAAAGCGAATGATAAGGGAAAA GTTCTCAGGGAATTGAAGTGTTGTTGCTATGGTGACGTC

>Sequence 3718

CCGGGCAGGTACCTCTTTGATGAATGAGCCTGGCAGACCCCGAATCGCAT
TTAAGTGAAAGCCATAGCCATTTTCACCTTTAGCCAGCCTGCAGAGTTTA
GGCTTATGATCTACTTCCTCTGTAGTATCTGGTGGACTTGAGACTTCCAA
ATAATGGGAGGGAGCTGGAGCCTCCTTGACAGAGCCAGTTGGGCAGTTC
TTGACTTTGATAGTAGAGAAAATGAGCCAGTCTGTACCT
>Sequence 3719

>Sequence 3720

CCGGGCAGGTACATGACTGATATTACACCTCAAGGTGTGGCTATGAGAGC TGGAGTTCTGGCTGATGATCACTTGATTGAAGTGAATGGAGAAATGTAG AGGATGCCAGCCATGAGGAAGTGGTTGAAAAGGTGAAGAAGTCAGGAAGC CGTGTCATGTTCCTGCTGGTGGACAAAGAAACTGACAAGCGTCATGTTGA GCAGAAGATACAATTCAAAAGAGAAACAGCCAGTTTGAAACTGTTACCCC ACCAGCCCCGAATTGTGGAGATGAAGAAAGGAAGCAATGGCTATGGGTTT CTATCTGAGGGCAGGCTTAGAACAGAAAGGGTAAATCATCAAGGACATAG ATTCTGGAAGTCCAGCAGAAGAGGCTGGCTTGAAGAAACAATGATCTGGT AGGTGGCTGTCAACGGCGTAGTCT

>Sequence 3721

>Sequence 3722

Page 620 of 685 of Table 3

### Table 3

TGGTGGTGAAGCTGTAGCCGCGCTCGGTGAGGATCTTCATGAGGTAGTCA GTCAGGTCCCGGCCAGCCAGGTCCAGCCCGCGTACCT

>Sequence 3723

GGGGAGTGCCGTATCACTCACTTACGATGAGTCGAATCGGACGCTGCGCG CGCGGTGCCGCGAGGTACATCCAAGATTAGGTCATAAAAAGTCTGTGG CAGCTACTCGGGAGGCTGAGGCAGGAGAATTGCTTGCACCCAGGAGGTGG AGGTTGCAGTGAGCTGAGACCACGCCACTGCACTCAAGCCTGGGCTATAA GAGCAAAATTCTGCTCCAAAAAAAAGTCCGTGGCTTCAATCTTGGGGGCT CTGCCTCTCTGGCTTTTTGCTCAGTTACTCTGAAAAAAGCCAGGTGTCAC ACTGTAAGCTGTCCTACAGAGAGGCCCATGTCAAAAAGAACTTATGTTTT TTGCCAAGAGCCACATGAATGAACTTGGAAACTGAGTCACACTTTGCACA ATTATGTACCTGGCCC

>Sequence 3724

AGGTACACGTCTCTGTCTGGGCCTCGGCCAGGGTGCCGAGGGCCAGCATG
GACACCAGGACCAGGGCGCAGATCAC

>Sequence 3725

>Sequence 3726

>Sequence 3727

>Sequence 3728

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### Table 3

>Sequence 3730

CCGGGCAGGTACAGCCCCCACCCCCCGTCCAAAGGTCTTGCGTTGTAAAT
GCCACCACCATTGTCCAGAAGACTCAGTCAACAATATTTGCAGCACAGAC
GGATATTGTTTCACGATGATAGAAGAGGATGACTCTGGGTTGCCTGTGGT
CACTTCTGGTTGCCTAGGACTAGAAGGCTCAGATTTTCAGTGTCGGGACA
CTCCCATTCCCCATCAAAGAAGATCAATTGAATGCTGCACAGAAAGGAAC
GAATGTAATAAAGACCTACACCCTACACTGCCTCCATTGAAAAACAGAGA
TTTTGTTGATGGACCTATACACCACAGGGCTTTACTTATATCTGTGACTG
TCTGTAGTTTGCTCTTGGTCCTTATCATATTATTTTTGTTACTTCCGGTAT
AAAAGACAAGAAACCAGACCTCGATACAGCATTGGG
>Sequence 3731

>Sequence 3732

CCGGGCAGGTACGCGGGAGGCATTGAGGCAGCCAGCGCATGGGCTTCTG CTGAGGGGGCAAGCGGAGCTTGAGGAAACCGCAGATAAGTTTTTTTCTCT TTGAAAGATAGAGATTAATGCATCTACTGAAAAAATATAGTCAATACGTT ACTAAGATATTGGTTTAGCGATAAGTTTTTAACGTAATGTCAATAGCTTA AGATTTTAAGAGAAAATATGAAGACTTAGAAGAGTAGCATGAGGAACGAA AAGATAAAAGGTTTCTAAAACATGACGGAGGTTGAGATGAAGCTTCTTCA TGGAGCAAAGACTTAAAACATAAAGGTACCTT

>Sequence 3733

CCGGGCAGGTACTGGTGTTGTGATCGGAACGTGTCGATCCCCTCTTCTCA
TCACTGCTGCTCCAACTGGATTTATTACTCCGGGAATGGTCTGAGGGGGA
AAACCAATGTGTTTAGCGTGCCTGCCCACCTGCGCCTGAGCACAACTATC
CTGCAATCTGACCTGCCCCTCCTGCACAGGAAACCACCTTCCCCTCCCAA
TTGATGGTTCAAACACTGCCACCGCTGACTGCCCTGCATCTGTGGGTCTG
TAGAACAGAAAGGTAGAACAACTTATTTTTTAGGATTTAACGACAACCGG
TTGAAAAAAACGGTAGGGTGTCATGCTCACAGAGAATAAAGATTTGTAGAA
AAGGTGCTGAACTGCCCAAGGAAGGATTTCCTGTGCCCGGTTTGAAACA
>Sequence 3734

>Sequence 3735

> Page 622 of 685 of Table 3

#### Table 3

>Sequence 3736

CTACTAGTAGGGCGAATCTCACCTGCAGCGGCGGCCCCGGGCAGGTAC CCCATGTCCTCCCACACCAAAAGAGATCAGTTCTGGCAAGAAAGCTCCAA

>Sequence 3737

>Sequence 3739

>Sequence 3740

>Sequence 3741

> Page 623 of 685 of Table 3

#### Table 3

ACTACTTCATCCCAGCTAGTAAAATGGGGCAATAAGAACCAAAAAGCAGG TACTGTCCCTATGTAAGTAGACTTCCTAGTCCTGGCCAAAACATGAACTC CTAACACAAATTCAAATAACATAAAGTCCCT

>Sequence 3742

>Sequence 3743

TTGGGACGTGCCATGGCTTGGGAGAACTAGTGAGGAACATATTTCTCCAT GCCAGTCCTCTTCCTAAAGGCCCCGCGTACCT

>Sequence 3744

>Sequence 3745

>Sequence 3746

>Sequence 3747

CACGCTGGTTTTGCATCTTCAGGAGACGCTCGTAGCCCTCGCGCTTCTCC
TCGGCCAATTCGCGGAAGAAGTGGCTTACGCCTTCCAGAGCCACATTATC
GCGGTCGAAATAGAAGCCCAGAGAGAGGTTGGTGTAGGAGGCCTGCAGGT
TACCTT

>Sequence 3748

> Page 624 of 685 of Table 3

# Table 3

AAATGATTTGTTGTATATGATACTCATTTAATTTAACGCTTTTTGTTATTA TTACATTTAATATTTTATAATTTCATAAGATAATAGGGGGGGTAGACGGGG GGAATGTTTTTCGGTGATGGAAGAGTCCTATCCACT

>Sequence 3750

AGGTACAGAAGGGCGGTCCTGCTGACTTGGCTGGGCTAGAGGATGAGGAT GTCATCATTGAAGTGAATGGGGTGAATGTGCTAGATGAACCCTATGAGAA GGTGGTGGATAGAATCCAGAGCAGTGGGAAGAATGTCACACTTTCTAGTT CTGTTGGAAAGAAAGGCCTATTATTATTTCCAAGCTAAGAAAATCCCTAT CGTTTCCTCCCTGGCTGATTCCACTTGACACCCCTCCAGATTCTAAAGAA GGAATAGTGGTGGAGTTAAACCATGACTTGCACATGGCAAAAGAACGGGC CCACAGTACCTGCCCG

>Sequence 3751

>Sequence 3754

CCGGGCAGGTACCAACTGAAAAATAAGACAACCAATCCCATCATGGTGCC
AACCACTCTAGTTGTCTTGGGAAAGTCACTTATTTATCCATCTTGGCTTT
CTTGCTCAAAAATGATGGATAGCTACACCTCACAGTGAGGATTCAGTCAT
GTTAGCAAAGTGCCTTGAAGACAGGAAGCCAGACATTATAGGAGCATAAT
TTTTGCCCTGAAATGCATTTGGTATGGGTTGGGCATCAGATGTTTCTGAT
TTGTGAATTAGTCTGAGAATGTTAGACATGCAATGGTTTAAGGATTGCTA
GGAGCAAAACAGAACCATGTTGTGTGTTTTATGGGTAATCAGCCAGTTTGG
CAAACCACCAATGGCTTGAAACTTGTACCCT

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#### Table 3

>Sequence 3755

AGGTACGCGGGACTCTCGTAGGACTGCTCTACACTGGGCCTGTGTCAAT
GGCCATGAGGAAGTAGTAACATTTCTGGTAGACAGAAAGTGCCAGCTTGA
CGTCCTTGATGGCGAACACAGGACACCTCTGATGAAGGCTCTACAATGCC
ATCAGGAGGCTTGTGCAAATATTCTGATAGATTCTGGTGCCGATATAAAT
CTCGTAGATGTGTATGGCAACACGGCTTTTCATTATGCTGGTTAATAGGA
GAATTTGGCAGGGGGGGCAAACTTGTTGTCCCATGGTGCAGTCATCGAA
GTGCACAACAAGAAGAACACTTGCAGGAACACCTGATGAGGCTGCACCC
TTGGCGGAAAGAACACCTGACACAGCTGAAAGCTTGGTGGAAAAAACACC
TGATGAGGCTGCACCCTTGGTGGAAAGAACACCTGACACGGCTGAAAG
>Sequence 1756

GCGGCGGCCCGGGCAGGTACCTGCTGTGTGCTGGACAATGTTCTGGGTGC
TGGAGATGTAGTCGTGAACAAGAACAAGCCCTGAGCTTACATTCACCAGG
GCTAGTGACTGAAGACAGGCAGCAAACAGAGAAACAGATGCATCAACGGG
ATCATTTTCAGAAGCCAGAATTGTTACAGAGAAAATAAACCAGGGGTCCA
GAGCAGCAAGTGGCATTAGGGTGGCAGGTGTATAACATGGGCCAGGGGG
TCAGGACGACCACTCTGAATTAGTGACATTGGAGCACACCTTATTGGTGT
GTGGGGAAAGGGTGACCCACGCCGGAAAGGACTGCCAGTATTTGGCCTTG
GAGACCTGGGAACCTGGAGAATTCCAGAGGGAGAAAATGGGCCTTATATA
AGGGCGAAGGATAAGAAGAAATTATATGGG

>Sequence 3760

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## Table 3

>Sequence 3761

>Sequence 3762

AGGTACTGGACAGAGCTAGGAAAGCAAACCCATTTGCTTCTTCCTGCAGGAAACCCCTTGAGGTTAAGACCCCACAATCACATGAGGATGGAGTGGCTCACCCTCAGTCAACAGGCCAGACTCAAGGGGTTCCTGGCAAGTCATTTCTCCCTCAGGCCTTCGGTTTCCTCACCTACAAGATGAGAGGGCTGGACCAGATGGAAATTCAGGGGGTAAGGGGGATGTCCTCGCTCAGCCCACCCCCACCCCCACGGGACCCTGGAGCCTCCACACACGCCCCCACCCCCACGGACCCTGAGCCTCCACAAATCCTACCCAAGGTGCTGTCATCTATATGATCTCAGTATTTTAAACATCAGCTTCCAGCCCATATGGTGGTTCATGCTTGTAATATCAGCTGTTGAAGAGGCGCCTTAGAACTAGT

>Sequence 3763

AGGTACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAAACCCTTCATTTA
ATGTCATCCAGGGAGGGGCCAGGGATGGAGGGAGGGGTTGAGCAGCCA
GAGGCACTTATTTTTGGCTGGGATTCACCACTTTTCCCATGAAGAGGGGA
AACTTGCTTTTTTTTGGCCAATTTTTAACAATACAAAGGGTTTGTTGAACT
TGACCTCCGGGGGGATAGACATGGGTATTGGCCTCTAAAAACATGGCCC
AGCACTTTCTTTCCCTTTCCCTCATTGGTCATAACAGCCTTTATGCCA
CCCCCTTTTTTTATCCTTTAGGGGTTGCCTCCATCTTTGACCCCCGCGAG
AGGTCCATCCCCCCATTTCCTAAATACCCTTATGTGAAAGCCCCAATTAT
GACCCAAACACACCTCTTCAAAATCTATAGGGTCCCCCTTTACTGGACT
>Sequence 3764

GCGAGGACTTTTAAGAAAAGGCGGGGTTTAACTATGTTGGTCAGGCTGG
TCTCAAACTCCTAACCTCGCGATCTGCCCGCCTTGGCCTCCCGAAGTGCT
GGAATTACAAGCATGAGCCACCATACCCGGCCTGATACTTTTGCTTTTCT
TATTGAGGTATAAAATGTAAGCACCTTAAAATTCCCTTCCCTTATATGAA
CACTGCATTTTGCTGGATTTTTCAGACACTTAATTTCAACAACCAAGTGA
ATAACTCTTAACATGGAAATTAGAGCTTGGTCCCAGTGACTCAGAGCTAA
GGCTAATATTGAGCCTGCAGAAGAAAATTTAATAACGGCCTTGTTAGTTTT
TTCTGGGGAGTCTCTCCTGCAGATGTCCCAGCCTTCTTACTGAAGCCATG
GAAGAAGCCTATTT

>Sequence 3765

ACGTACAGATGGCGTCTTGCTATGTTGCCCAAGCTGGTCTTAAACTCCTG GCCTCAAGCAATCCTTCTGCCTTGGCCCCCCAAAGTGCTGGGATTGTGGG CATGAGCTGCTGTGCCCAGCCTCCATGTTTTAATATCAACTCTCACTCCT GAATTCAGTTGCTTTGCCCAAGATAGGAGTTCTCTGATGCATAAATTATT GGGCTCTTTTAGGGTAAGAAGTTTGAGTCTTTGTCTGGCCACATCTTGAC TAGGTATTGCCTACTCTGAAGACCTTTAATGGCTTCCCTCTTTCATCTGC TGAGTATGTAACTTGCAATGGGCAGCTATCCAGGGACTCGTTCTGAGTAA GTGTGTTCCTTAATGTTTATTTAGCTCTGAAGCGAGAGTGATATACTTTA GGACTT

> Page 627 of 685 of Table 3

## Table 3

>Sequence 3766

AGGTACGCGGGAGGTGTGCCCTGGTGCATAAATAGTTACTCAGCTGTGC
TGGCACACTCAGAAGCTTGGACCGCATCCTAGCCGCCGACTCACACAAGG
CAGGTGGGTGAGGAAATCCAGAGTTGCCATGGAGAAAATTCCAGTGTCAG
CATTCCTTGCTCCTTGTGGCCCCTCTCCTACACTTCTGGCCCAGAGATAC
CCACAGTCAAAACCTGGGAGCCCAAAAGGGACACAAAGGGACTCTCGGAC
CCAAAACTGCCCCAAGACCCTTTTTCAGAGGTTTGGGGGGGACCAAACTC
ATCTTGGAACTCATGACATTTTGATAGAAGCCTTTATTATAAAATCCATA
GACAGGCCACCACAAAACCCCTTGGATGGATTATTTCATCCACTTGGGATTG
AGTGGCCCCACCACATGTCCAAAAGCTTTTTAAAGAAAAGGTGTTTTGCTT
GAAAATTAAAAAGAAATTCCCAAAAATT

>Sequence 3767

CCGGGCAGGTACTACTCGATTGTCAACGTCAAGGAGTCGCAGGTCGCCTG GTTCTAGGAATAATGGGGGAAGTATGTAGGAGTTGAAGATTAGTCCGCCG TAGTCGGTGTACGCGGGGATTCCCATGGCTGGCCAGAGGAGGAACGCTTT GTGTTCTCATCGGAGCTGCATGGGAAGTCTGCATACAGCAAAGTGACCTG CATGCCTCACCTTATGGAAAGGATGGTGGGCTCTGGGCTCCTGTGGCTGG CCTTGGTCTCCTGCATTCTTGACCCAGGCATCTGCAGTGCAGCGAGGTGA TGGAGACCCCATTGAACCCAGTTCGTATGGGCTGGACCTGGACTGCGGAG CT

>Sequence 3768

CCGGGCAGGTACAGCTAGGCTCAGCAGCAAAAGTGAAGAATAAGAATGAA AGGTGAAAAGCTGACAGATGCCACGCAGAGCAAGGACTTCCATGAAGGTC CGTGTCCTGTGTGCCAAACACAGTCAACATTCCATCATTTTCTCATTGCT CTTAAACGAGCAAAACCAAATTCTTTTTCTATTTAAAGAAATATTAAATC TTTATTTTCCCCAACATAATTTGATCAGGTAAGGCAAAGATAAGTCCA CCATCACTGGGGACAGCAACATACAGACTTCAGAAATAGCCCTGAAT CATCAGTAACATTCTATCGTGGTCCCGCGTACCTCGGCCGCTCTAGA >Sequence 3769

>Sequence 3770

AGGTACGCGGGGGTAACTGAAAATCCACAAGACAGAATAGCCAGATCTCA
GAGGAGCCTGGCTAAGCAAAACCCTGCAGAACGGCTGCCTAATTTACAGC
AACCATGAGGCCACTTAAGGATGCAGCAAGAAGGAGCCATCTGCAATCCA
GGAAGAAATTCCTTGCCAGGAACCAAATTGGTTGTCACCTTCATCTAGGA
CTTCTAGCCTCGAGAACTTACAAATGGTGATCATCAAGTCAAGGATA
GTCTGGAGCAATTGAGATGTCACTTTACATGGGAGATATCCATTGATGAC
GATGAAATGCCTGATTTAGAAAACAGAGTCTTGGATCAGATTGAAT
>Sequence 3771

>Sequence 3772

AGGTACGCGGGGAGCTCACAAAGAGTCACCGCAGAAACACTTCTGGCACA

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# Table 3

CCTTCCATAGCAGTGTCTGGAACCTCTCTCTCCTCAGATCAGAGTCGATC
TGAGTTAGATTTGAGTGAGTCATTTACAGAAGACTCAGAGGATACTGTTA
GCATAAGAAGGCATGCTTGTCCCTGGGGCTTTAGACAAGGACTCCTTGGA
AGAGACTGAAGAAAGCATTGATGCCTTAGTGTGCTCGCAGTTATCTACAA
ACACTCACCGTATGGCAAGTGGCCTATTAACTACCAACCTTAA
>Sequence 3773

>Sequence 3774

CCGGGCAGGTACGCGGACAACAGGGTTTGTGCTCCTATGAGAATTTAAT GCTGCTGCTGATCTGACAGGAGGTGGAGCTCAGGCAGCAATGCCAGCAAT GGGGAGCTGCTGTAAATACAGATGAAGTTTCACTCACTCGCCCACCACTA ACCTTCTGCTGTGGCCCATTTCCTAACAGGCCATGGGTTGGTACATCA GTTTACTTCGGTAGCCAGTGATTGTTATAGTTAATTCTGCAAAAAAACAA AACCAGTTATGCAAAAACAAGAGTACCT

>Sequence 3776

CCGGGCAGGTACTGCAATAACAAAATACAGCAATAAAACAACTGGACACT CCTAGGGGACACCAAAGATAAAGGGCCCATTAATCAGGTGAGGCCAGAG AAACCGGAAGGCTATTTTAAAGTGTTTAATATAATCATGTAAGGAAAAAA AAATCTCCCCAAAACAATAAAGTCAAGCAATTTCATATCTATATGAACTT ATTTTCATATCTATATGACTAAAAAATGAAAATGACCTTTGCTGGCATTA TTGCTACGCGAATATCCATACTTTCCCCCTTGATATTTAAGGACATGTGG GAGAACTTTATAAACAAGTAAAGTGTGCAGAGAAGGCACTGTTTTGGCAC TAGCAAAAAGGACAGTTAATTTCACATGAATCACGTGAACTTTAATAACC CATGATAT

>Sequence 3777

>Sequence 3778

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#### Table 3

AGGTACTCAAAGCACGTTGCTGGGAGGCAGTGGACAGACTGCTCAGCAAC
TAACCGCTCCGTGAACTCCACATCGTTCTCAAATTCTGGGAAATGTTCCA
TCTCAATTCCAACCTATACCAACAGGAGGGAGAGGCCAACTTATCAGAAG
GAGGAGAACAGGCCAATTTCCTGTGCCAGAAATTAAGGCCAGGCCTACC
ACTCCTATGGCACAGTATTGATGAGAGACATCAGTGGAGCTCCCCACCTC
CACCCCAGGCTTGGAACTTAGGGAATGACTGGTTTTTGTCATTTCACACA
ACAGCTGAAGGATTCTGTCCCCACCTCGTCCTCTGTGAAGTCTGCTGGAC
GTACCTGCCAGAATCTTCTGAAGATGACGTTTGCTGAACACTGACCCACA
GGGGTTTGATGGATA

>Sequence 3779

>Sequence 3780

>Sequence 3781

CCGGGCAGGTACGCGGGTAGAAATGAGCATACAATAATAGGAACACTATG
AAAAAGAAGGTAATGAGAGGTGGGACCAAGTCTATAAGATATTAAAGGG
TAAGTCTCTCCGGCCCGGTTTCCCTCGGTGTGCTACTGTGCGCGCGATCC
AGCACCATGGGGAAGCGGGACAATCGGGTGGCCTATATGAACCCAATAGC
AATGGCGAGATCAAGGGGTCCAATCCAGTCTTCAGGGCCAACAATACAGG
ATTATCTGAATCGACCAAGGCCTACCTGGGAAGAAGTAAAAGAGCAACTA
GAAAAGGAAAAGAAAGGCTCCAAGGCTTTGGCTGAATTTGAAGAAAAAAT
GAATGAGAACTGGAAGAAAGAACTGGAAAAAACACAGAGAGAAAATTGTTAA
GTGGAAGTGA

>Sequence 3782

GGÁTCTCCACCGCGGTGGCGGCCGAGGTACCAGACTAGACATGGGCTTCC
TTACTATGTCCCGACACAGACAGATAGGCATCACTATTCAAGAGGACTGG
GGCTTGCAACCACAGATTAGCATCTTATTTGCCATTTAGGTCCCAGATTG
CTTGAGCCCAGGAGTTCAAGACCAGCCTGGGCAACATAGCAAGACCTCAT
CTCTACAAAAATAAAAAAAATTAGCCAAGCATCATAGTGCACGACTGTTG
TCCCAACTACTCAGGAGGCTGGGGCAGGACGATTGCTTGAGCCCAGGAGC
TTAAAGCTGCAGTAAGTGGTGACTTGCCACTCCAGCCTGGGCAAC
AAAGCAAGACTCTGTCTCAAAAAAAGAAGAAGAAAGCTGAAAGGGTTAGAGA
CTCAGCAGATGTTTCTAGATAAGACCAGTTTGT

>Sequence 3783

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#### Table 3

GTTCCT

>Sequence 3784

>Sequence 3785

>Sequence 3786

CCGGGCAGGTACAAGGGCATGACAGGCTGGGAGGTGGCTGGTGATCACAT
TTACACAGCTGCTGGAGCCTCAGACAATGACTTCATGATTCTCACTCTGG
TTGTGCCAGGATTTAGACCTCCGCAGTCGGTGATGGCAGACACAGAGAAT
AAAGAGGTGGCCAGAATCACATTTGTCTTTGAGACCCTCTGTTCTGTGAA
CTGTGAGCTCTACTTCATGGTGGGTGTGAATTCTAGGACCAACACTCCTG
TGGAGACGTGGAAAGGTTCCAAAGGCAAACAGTCCTATACCTACATCATT
GAGGAGAACACTACCACGAGCTTCACCTGGGCCTTCCAGAGGACCACTTT
TCATGAGGCAAGCAGGAAGTTCCT

>Sequence 3787

TGTGGCTATACACT

>Sequence 3788

AGGTACAGGCTGAAAGCGAAGTCCACGTTGGCGGAGGCTAATCCGAGGTC CACGTGTGTCCCTCGGTCTTGGTTCTCCTGGGTCAGATTCTCCTCGTCAA GTGGGCTGTTAGGGTGGCAGAGGACAGCAGGGCAGAACCCAGCCGCCAAG AGCCCCAGAGCCAGGAGAGGTAACATTCTCTCCATTCTCAACTCTCAGGG AGCTGGATGTAGCTGGTGGATTCCAAAGCCGTCTGTCTGGAGTCCCCGCG TACCTGCCCG

>Sequence 3789

>Sequence 3790

> Page 631 of 685 of Table 3

# Table 3

CCTAGGTGTGGCATTCTGGATCAGCAAGGATTCCCTGGCAGACCGGGCCC TTCTACCCCATGTCCTCTGCAAAAATTGTGTTGTAGAATTAAACTTCCGG CAGAAGGAGGCCCTTCTTCCCACCAT

>Sequence 3791

>Sequence 3793

AGGTACTTGTGACAGGCAGACGTGATTGCAGCCACGAACACGATGAACTC ACTGAAGTCCACCTGGGCATCTGCATTGGCGTCCAGGTCCTTGAGCAATT TATCCACGGCATCCTTGTCTTTTCCACTCTGCAGGAAGCCTGGTAGCTCC TTCTCCATCAGCACCTTGAGCTCCCCCTTGGTCAGGGTCTGCGTGCTGCC CTCGCTGCCCGAATATCGGGAAAAGACGTCTATGATCATGCCCATGGCTG TCTCTAGTTCCGTCATGGTGCTAGATTCAGACCCACCTTCCTCCTGGGGG CTGGCAGGGCCGAGAAAATGTCCCCGCGTACGCGGGGGACTCAGATCCCA GCCAGTGGACTTAGCCCCTGGTTGCTCCTCCGATAACTGGGGTGACCTTG GTTAATATTCACCAGCAGCCTCCCCCGTTGCCCCTCTGGATCCACTGCTT AAATACGGACGAGGACAGGGCCCTGTCTCCTCAGCTTCAGGCACCACCAC TGACCTGGGACAGTGAATCGACAATGCCGTCTTCTGTCTCGTGGGGCATC CTCCTGCTGGCAAGCCTGTGCTGCCTGGTCCCTGTCTTCCTGGGCTGAGA TCCCCAGGGAGATGCTTGCCAAAAGACAGATACATCCCACCATGATCAGG ATCACCCAACCCTCAACAAGACAACCCCAACCTGGCTGAGTTCCGCCTCA GGCTATACCGCCAGCTGGCACACCAGTTCAACAAGCCCAAATATCTTCTT CTCCCAATGAG

>Sequence 3794

CCGGGCAGGTACGCGGGTTCTCATTCTTTTCTCCTTTATCTTCACTCTGA
TTTTTCTTTTGTCATTCAACGCTTACTCCCTTCCCCATACCTCAGTCCTC
CAGGTGACACCTGGGCGCTTTTCTGCCTGAACAGCATTTCCCACCAACGG
CCACAGCAGTCGGTCAGTGTCCTCTTGAGCACCTCCTGAAGCTGCAGTGT
CATTTGCTGTTTGCCCTAAAAAAGCCACGCCCAGATTTCTTCTACCGCTGC
TTCCCTGATGGGCTAGCCCATTCTGACTTGATGTGTACCT
>Sequence 3795

CAATTGATCTACACCGCGGCGGCGGCGGCGAGGTACTGTGCTCAAAGCTGAA
AATGTTTACTGTCTTTCCCCTCACAAAGTTTTCAGACTGCTGGCCTAGGG
TTTTCAGGGTGGCGGATAGAGACGGTATTAACCAAAACAGAGAAATCATC
CATTATTATGATGATGGGTCAGAAAGAAAGACGGTATCAATCTTGGAGCA
GTTAAATGGGAGGTGTCAAAAGGACACACAGCAAGGCAGCCCAGTGTGAAA
TGGAAAGCTCATCCCACTGAAGGGGCGTGGCACTGGCTATCCGCTCTGCC
TAGTACCTGCCCG

>Sequence 3796

AGGTACTTAGAGTCCAATTTTCCTACCTTGGCTTGTGCATGAGGTTGCCT GGTTGCCACGGTGCCTGCTTTTCTCCCTGTGTCACCTCCACTGCCTCCTG AATAACAGTCTCAGGTTTGTCTATGGCCTCTGCAGGGAGCCGGGATTCCC AGACAGAGCAGGCCACTTAAATCAGGTGGGACGCCTCTCCCCTCTTGGCC GGAGTCCAACTCCACGCAGGCACAGAGATCCCAGATGGGCCCCCAAGTTT

> Page 632 of 685 of Table 3

# Table 3

GTGAGAAACACATTCATCTGTCCAAACCCAAAGAATGGACTCAGAGACAC AAAAGAACAATGGAAGAGAGAATTTTAATGGTGATCGTGCAAGAATGGGT GTCTGGTAGGCAGGCCCCGCGTACCTGCCCG

>Sequence 3797

AGGCAGCTCGGTCTGGTTCATTTGATCACACGGCCGTGTCTAAGATGCTG
CTAATGTCAGTCACTGGGTGCACTAAAGGATCTCTTATTTTATGTAAAAC
GTTGGGATTGACAAGATAGATCTGACACTCTGTTAAGTTACCCTCTGAAG
CTACGGCTTGTGAAATACTAATGACAGCATCATCCTGCCAAGCGAAAGAG
GCAGGCATAAGCAAGGACAAATTAAAAAGGGGGTAAGAGCCTTATCATGAT
GAGGAGTCTTGTTTTTGACATCTTGGGAAAAGCTGTCCATAGCGTGAAGTC
GTCAATTTCTCACCATGGTTTGCAGTTTGACTGGCCCTAGTTAGGTGAAG
TCTCTGAGTGGCACACCCTCAAGCCTGAGGGTTTTTCCTTTAAACTTGC
ATTGAGTTGTCCATCTCCAGCATATAGGGCTTCAGGAGCAAA

>Sequence 3798

>Sequence 3799

CCGGGCCGGTACAGAAGGGCCATGCTGTTATTACTCTTACACAAGGAGGC
AGCCCTCGAGCCACAGGGTCCAGCTGTTGGCTATAATAGCCTACCGGTCT
CTGATGATCACCATGTTTCTGGAATTCAAGCCAGGAAGAAGCACCTATCT
GTCTTCTGGATCTAAAACTGAATATCAACCTACTTTCAACTTACTAAGAA
AGGGGATCATGGACATTGACACATATCTTGAAAGAATCGGCTATCAGAAG
ACTAGGAACAAATTGGTACTTGCACACATTAACTGACATTCTTCAACCCC
AGATCCGAGCTGCTCCCTTTGTGGACCTTAACATCCATGGTGGGGATGCC
ATGGACTTAGGCTTATATGCCATTATGATCACCTTGTGAGAAGAAGACTG
GGTGGATGGTGTTATCAAGTCCATCATCCTCTGTGC

>Sequence 3801

>Sequence 3802

CCGGGCAGGTACCGGGCTGCTGGACCTCCATTGCTTTCGGCTTTTGTCTC

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# Table 3

TTTCTCCTTTTGAAGCTCAAAAGGGCATATAGTGGACTCTGATCCTACGA TGCCTTTTTTCCCTGCTTTGGCTGCCTCTGGAGAGGGGCATGTGCCAAGC AGACACGGCGAAAGCCAAACGACACAATGAGCGTTCTAAGAAAGGAAACT CCTTCGGAATGAAAAGCTTAGGCCACATTGGAAAGGGTAGAAGTGAGAGA GAAACTTTTTCATTGGGGACACTAGGCCGGTGGGTGGGGCCCGTCACGCT GTTGTAACAAAGTACCTTGGGCGT

>Sequence 3803

AGGTACGCGGGAGAAATAAAATGTGGTCCTAATGCCAGGACTAAAATGGA CCTAGTGCCAAATTAGTCCAATTGTAGCCTTTGCTTCAGCTGGATCATCC CGTGTTAGTTAGAGCTCAGCTGTGGCCATTATTCATTTGTTGATTGCTGG CCCATTCTTGGAAGTGCGTAAGCATCCCATTCATTTGAAGCTGTTTTCTT AAAAATTATCATTCACATTTGATTATTTTTTCCTTTTGGGCTGCCCAAGA TAGCACTTCCAGATGTCTATAAACCCACCATGTGATTGCAATCTAGGGGG GACTGGATCATGAATTGGGCCTATACCGAATCAGACTGATCCCATAAAAT AACAAAAAAAAAGGCTGCATACTATATGCATGTTGCG

>Sequence 3804

>Sequence 3805

>Sequence 3806

>Sequence 3807

AGGTACTTTTTTTTTTTTTTTTTTTTTTTTTTCGCACTACCTCCCGGGT
CGGGAGTGGGTAATTTGCGCGCCTGCTGCTTCCTTGGATGTGGTAGCCG
TTTCTCAGGCTCCCTCTCCGGAATCGAACCCTGATTCCCCGTCACCCGTG
GTCACCATGGTAGGGCACGGCGACTACCATCGAAAGTTGATAGGGCAGAC
GTTCGAATGGGTTCGTCGCCCCCACGGGGGGGCGTGCAGATCGGCGCCC
CGCTGTACCATGCCCGGAGCGCTCGTTCTAGTAACTATGTGGGATCCCC
CCGGCGCTGCAGGTAATTGCGATTATCAGAGCTATATCGAATACCCGTNC
CAGCCTCGAAGGGGAGGCACCGAGTACCCCAGGCTTTTTGTGTCCTCTT
TCAGTGGAGGGGTTAATTTGCCCCCC

>Sequence 3808

AGGTACTGTTCCCTTCTGATTTGGTCTAGATACCAGAATCCATTCTCTTCCGTCAAACGGAAGACACAAGGCACCTGAGGCTGATCCTTCCCAGAAATTAACTCCAGAGGCTGCACA

>Sequence 3809

> Page 634 of 685 of Table 3

## Table 3

AGTGGCCTTGT >Sequence 3810 ACT >Sequence 3811

>Sequence 3812

AGGTACGCGGGAGTCTAGTTCCTGGTTGCCGGCTGAAATAACCTGAATTC
AAGCCAGGAAGAAGTAGCAATCTGTCTTCTGGATTAAAACTGAAGATCAA
CCTACTTTCAACTTACTAAGAAAGGTATTAAGCGCCTTTCTGAGAGCTCT
TAATTAGGCTTCCTAAGCACGTTCACTCTGCCTGCTTTAAGTCTTATATT
TATGATCAAGATGAAAGGGAGGGATGTTTCACTGCACAGAGATTCTACAA
GTGGATATATAAAGCTAATAATGTTTTCAGTGAGCTCTTCTCTGGCAACT
ACTTTCCAAGTGCTTTCAGCATTCCACCTTGAAGCACAACGTTAATAATG

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#### Table 3

CACAATTTCTTATGTTCAGCCACAGAATGTTCACGTGTGAT

>Sequence 3817

AGGTACTTCATTCCACATTCAATCAAAGCAAGTGCAACCAGCACAGGTGC CCTTCCCAATCCTGCAACACACACACACACAGCAACCTGGCTCTT CACGAAATTTGGTTTTTAACAGGTTTAACCAATCATCTACTATCTGATTA GGGGTGGAGCTCCATCAAATGGCCAATCTAGAACGTGGATTCCTTCT TTTTCAACTGGAGCTTTATCATATGTAGCCCCGCGTATCTGCCCG

>Sequence 3818

AGTTGACGCTACTCGAATATCGTGGAGCGAGATTGTACATCCACCGGGGG GGCGGCCGTACTGCAGCCTATCCTGTCCACCTTGCGCGCCTGAGCTTCAG GGCCGGACCGGCCCGCGTAAGCCCCATGCCCCGCACGCCGGGGCATTTTT TTTGACCGACGGTAAGCGTTGCTGGACAAATGGTTTTTTTCGCAAACATT TTGCCTGTCAGAAATTATCGTCCTACACTATTTAACAGAATCGGGCCGTG CCACACTGCGCGGCCCCGCAAGAATATA

>Sequence 3819

>Sequence 3820

>Sequence 3821

>Sequence 3822

CGCCGCGATCGAATCANATAGGGCAAATCGGAGCTCCACCTTGGTGGCGG
ACGACGTACGCGGACCACTTCTCTGTGACACATTGCCTTCTGTTTTCTC
CAGCATGCGCTTGCTCCAGCTCCTGTTCAGGGCCAGCCCTGCCACCCTGC
TCCTGGTTCTCTGCCTGCAGTTGGGGGCCAACAAAGCTCAGGACAACACT
CGGAAGATCATAATAAAGAATTTTGACGTTCCAAGTCAATCCGTCCAAAT
GACGAAGTCCCTGCAGTGCTTGCAGTTCAAGCAGAATTGAAAGAATGCAT
GGTGGTTAAAACTTACCTCATTAGCAGCATCCCTCTACAAGGTGCATTTA
ACTATAAGTATACTGCCTGCCTATGTGACGACAATTCCAGAAAACCTTCTAC
TGGGACTTTTACACCAACAGAACTGTGCAAAATTGCAGCCCTCGTTGATGT
TATTCGGGAATTAGGCATCTGCCCTGATGATGCTTGCTGTAATTCCCCAT

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## Table 3

CAAAAT

>Sequence 3823

>Sequence 3824

TAGCACTCCACAAAAAATCGACGCCTCAAAGTTCAAAAGGGTGGGGCGAA AACCCCTGACCAGGGACCTATAAAAAGCATAACCAGGCCGGTTTTCACC CCTTGGGAAAGCTCCCCTTCAGTGCAGCCTCTTCCCTGTTTCCGAACCCC TGTCCCGCTTTACCCGGGATAAACCTGGTTCCCGCCTTTTTCCTCCCCTT TCGGGGAAGGCGGTGGGCCGCTTTTCCTC

>Sequence 3825

>Sequence 3826

>Sequence 3828

>Sequence 3829

CCGGCAGGTACGCGGGAGGCATTGAGGCAGCCAGCGCAGGGGCTTCTG CTGAGGGGGCAGGCGGAGCTTGAGGAAACCGCAGATAAGTTTTTTTCTCT TTGAAAGATAGAGATTAATACAACTACTTAAAAAATATAGTCAATAGGTT ACTAAGATATTGCTTAGCGTTAAGGTTTTAACGGAATTTTAAATAGGCTA AGGATTTTAAGAGAAAATATGAAGGACTTATAAGAGTAGCATGAGGAAGG

> Page 637 of 685 of Table 3

# Table 3

>Sequence 3830

>Sequence 3831

CCGGGCAGGTACGCGGGCTTCCTTTTCAGATTCCCTGTCTGCTCAATTAA
AGATGTTTGAATCCAAAGGAAGTCAAGGAAGAAAAAGCATGGAAAGGAAG
AGAACTGATTCCTACTGAAAATTCAAATTCTATTACCATTCTAACTTTCA
TAAAAAGTTGGGATCAAAAAACAACTGTTTTTCTTGCCCGGGCTTATATT
AGGGGGTGATTCTTAAAGGACATTAGGATTGGTGCTCATAAATGGTTAAT
CATGCTGTGTGCTAGCCAGGGCCAGCTGGTACCT

>Sequence 3833

>Sequence 3834

>Sequence 3835

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#### Table 3

CCTTTAATCCCCGGGCCTTTTTTAAAAATGGG

>Sequence 3836

AGGTACGCGGGGACCTCATTCATTTCTACCGGTCTCTAGTAGTGCAGCTTCGGCTGGTGTCATCGGTGTACTTCCTCCGCTGCCGCCCCGCAAGGCTTCGCGTCATCGAGGCCATTTCCAGCGACTTGTCGCAC

>Sequence 3837

>Sequence 3838

>Sequence 3839

>Sequence 3840

>Sequence 3841

TTGATACCTCCACTCATTAAGTCGAATGGGAATCTGCACCTCCACGGCCG
TGCGCCCGGGCAGGTACGACACCCCTCAAGAGGTGGCCGAAGCTTTCCGG
TCTTCCCTGACAGAGACCATAAAAGGAGTCGATGCTAAGAATGGGCACGG
TCCCAGGGGAACAACAAAAGCGGAAGATCGTCCTGAACCCTTCAGGCTCC
ATGAACATCTACCTGGTGCTAGATGGATCAGACAGCATTGGAGCAGCAA
CTTCACAGGAGCCAAAAAATGTCTAATCAACTTAAATTGAAAAGGTGGCA
AGTTATGGTGGGAAGCCAAGATATGGTCTTGTGACATATCCACATAACC
CCAAAAATTGGGTCAAAAATGTCTGAAGCAGAACCGCAGTAATGCAGACTG
GGTCACGAAAGCAGCTCAATGAAATCAATTATGAAGACCACAAGTTGAAA
TCAGGGACTAACACCAAGAAAGCCCTCCAAGCAGTGTAACCTTGGGCGGT

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## Table 3

CTAAAAC

>Seguence 3842

CCGGGCAGGTACTGTGGATCTTGGCTCACTGCAGCCTCCACCTCTTGGAT
TCAAGCAGTTCTCCTGCCTCAGCCTCCGAGTAGCTGGGAGCCACCATGT
CCAGCTGATTTTTGTATTTTTAGTAAATGAGTTTTCACCATGTTGGCCAA
GCTGGTCTTGAACTCCTGACCTCAAGTGAGCTGCCTACCTGGCCTCCCAA
AGCTCTGGGATTATAGGTGTGAGCCACTGTGCCAGGCCTGAGGTTGGGAG
AAATTTTGTCCATTTCTTTAGAACCAAAATTGGCAACCAGAGAGTATTTG
GATGTTACACCAAAATATTTAGTTTCCCTTTCTAGCCTAAATTGGGTTGTT
TATAGCACCCGTCTCCCCATTTGAGAAAAATGGTTAGGATG
>Sequence 3843

CGGGCAGGTACACCTGTCTTCTCTGGCTGCCCACCAGCGGCCTCTGGACC
GTCCAGGCCATGGATCCTAACGCTGCTTATGTGAACATGAGTAACCATTA
CCGGGGCCTGGCTTCAGCCAACCGTTGACTTTGCCTTTTAAGCCTTGTAT
TAATCCACCTTAATTGGGCCCTTTGAATTCCCAAATAAAGAATACATTTT
TCAATTCTTCCCCCTGTTGGAAGCAATTCTCTCATTGGCCCCTTTAAGCT
TATTGCTTGGTCCCCTGGGGGCCAACCCTTGGTGTGGCCACCAACTACGG
GGGCCCCCAGGCTTTTCTTTCCAAGGAGGCCCCTAGGGTTTTTTTCAAA
CACTTCCACTTGGAATAGAGATCCTTGGAGGAACTTGAAGTAATCCCAT
CCCAAAGGGGTTTTTTCCCAGTCAAGCGCTTTGTCCACTCCAAACTTTCTT
TTTGGCAAAAAGTTCCAAGGACCAACTCCATGCCTTTATGTAAAATTTGA
ACTCACTTGGGGGTAAAAATTGGCNCCTTTGGTTTTTCTTTGGAATGG
>Sequence 3844

AGGTACAGCAAAACCCACCTGTGTAAACACACACACAGCAAAGTGATGTAAGAAGTTTCCATATAAAGGGCTGCAGTATGGAGAGGTAATGTGCAAGCTGGTTTGCGGCTGTAAGGGCCACCTTGCTGCAGCTCTCCACTGATATGGTACCTGCCCG

>Sequence 3846

>Sequence 3847

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#### Table 3

>Sequence 3848

CCGGGCAGGTACTTCCGTGCTTCTTCATTTCTTCGATAGCCATAAAATTT
TCTAGCTCTCTATCACCATCCTTATTTATTTCTGGTTCTTGAGATCTTTT
CTCTGGCTGGCCATTTTCACTGCCTTTAAGCCTTTGTGACTCTTCCTCTG
ATGTCAGCTATAAGGCTCGCTCTGGGTTGCTGTTTTCAGAAGAGTATTTT
GGCATCTGTTTTTCTTTGTAGTCAGAAACTAATTCGCAAATTCTGTGATA
CTCTTCACTTTGCTGGGAAATTGCTGATTTTCAGGTGTTCTGCTCT
TCCTTTGAGGAATTAATCCATCATCACCATTGCCAGCAGTGACACCATTA
GTCAGGTTTTCTAGTAATCCCACATTATTACTTTGATGCTT
>Sequence 3849

>Sequence 3850

>Sequence 3851

>Sequence 3852

>Sequence 3853

GGGGCCATTGAGACTGCCATGGAAGACTTGAAAGGTCACGTATCTGATAC
TTCTGGAGAGACCATTCAAGGCTTCTGGCTCTTGACAAAGATAGACCACT
GGAACAATGAGAAGGAGAGAATTCTACTGGTCACAGACAAGACTCTCTTG
ATCTGCAAATACGACTTCATCATGCTGAGTTGTGTGCAGCTGCAGCGGAT
TCCTCTGAGCGCTGTCTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTG
GGATGTCCCTGGACAAGAGACAAGGAGAAGGCCTTAGGATCTACTGGGGG
AGTCCGGAGGAGCAGTCTCTTCTGTCCCGCTGGAACCCATGGTCCACTGA

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# Table 3

AGTTCCTTATGCTACTTTCACTGAGCATCCTATGAAATACACCAGTGAGA AATTCCTTGAAATTTGCAAGTTGTCTGGGTTCATGTCTA >Sequence 3854

AGGTACCTGGTGAATTTCTTGCACAAGTTGCGGCAGCTGCCTGAGCGATA
CATGATGAACAGCGTCCTGGAAAACTTCACCATCCTCCAGGTGGTGACAA
ACAGAGACACCCAGGAACTGCTGCTCTGCACCGCCTATGTCTTCGAGGTC
TCCACCAGCGAGCGTGGGGCCCAGCATCACATTTACCGCCTGGTCAGGGA
CTGAAGGGGGACCCCAAAACTGGCTCACCCCCCAGAACACCCTCCTCCCA
GGGAGGGTCCTCCAGCTCACCTCATGCTTCTTATTTGGGGAGAGGGCTGT
GATGTAAAGGGGTTGACCTCAGAGGCCTAAGCAACTGGGGCCATCCCCC
CATTAGAGGGGCCCCCAAAACTTGGTTGGAGAGCTGAACAGGCTGGGACT
GAGGAAAGGATAAACCCCGATATTGGGACCTCA

>Sequence 3856

TGAAAGTGACTCACTTCTGAAATCCGGCGAATTGGTTCTGGCAACTGCGG CGGCCGCCGGGCAGGTATTCGGGATTATTTCTTTGGAAAAAAAGAGATTT TATGTCTCTGATTGGTGAGTGGCAAGAGTTCAACATCGCCAGGTGGTGG GCTCATGCCTGTAATTCCAGCACTTTGGGAGATTGAGGTGAGTGGATCAC TTGAGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGTGAAACCCTGTC TCTACCAAAAATACAAAAATTAGCCAGGCGTAGTGGCATGTGCCTGTAAT CCCAGCTATTCGGGAGGCTAAGGCATGAGAATCACTTGAATCTGGGAGGC GAAGGTTGCGGTGAGCAGAGATTGCACCTGGGTGACAGAGTGAGACCTTG

>Sequence 3857

CCGGGCAGGTACCTTGAAGTTCAGATGAGATTTCGGACTTTTGAGTTGAT
GCTGAAACAGCTTGAGATTTTTTGGGGACTACTGAGAGATGATAATTGTAT
TGTGCAATATGAGAAGGACATGAGATTTTGGTGGGCCATAGGTGTGAAATGA
CATTGTTTGGATGTGTTTACCCTCCAAATCTCTTGTTGAATGTGATCTTA
AACGTTGGTGGTGGGCCTAGTGGAAGGTGTTGAATCATGGGGGTGGACTC
TTCATAATTTGCTTAGCTCCATCCCCTTGGTGATGAGCAAGTCCTTGCTC
TGTTGTCACATGAGAGCTGGTTGTTTAAAACAGCCTGCCGGGTTCCCC
TTCTTGCTATTCATTTCTTTTTGACACGTGATACACTGGCCCTCACTT
>Sequence 3858

GGCGAATTGGAGCTGCCCGTGGCGCGGCCGACGGGACTTTGTCGTCGG
GGGTAGATGGAAGGAAGAACTTGAGTGCTTAGACCTGACGCTGGGAGGAG
ATACTGTCACCTAGGTTACTTGTAGGACCCTATACGGCAACCTCCTTTGC
CAGGAACTATTTATAAACATCCTGCAGGAAAATGAGTCTATATGGCAGAA
TCCACTTTTCCCACCTTGCCCAACAGTCGAAAAACATCAGAAGAAGAAAA
CATTAAAAAATGACAAGGAAGTTAATGGAAGTCAGCAATGTGATGGTGTT
TGGGGGTGGAGCCCCTTAGAAGGTAATTTAATGCCCCTTGGAAAGAAGAA
GCCAAAAAAGCTTTGCGCACCTTTTTTTTTCTTGGCTTGTGGAGGGGCCCA
AAAAAAGCCCGGCTTGTTTTGGCACCCTTGCCAAGTAAGGAACCCCTCAC
TTATTAAGGTTAGGCCTTTTTCCCG

>Sequence 3859

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# Table 3

TGTTTTTTTTGCCTGCCAGTGACACATAAATATCACTATTGCCAAATTC GCTGAAAAACTGCAAATGCCGCGGTTCAGTTCTTCATGGCTGGGGAGGCC TCACAATCACAGCAGAAGGTGAAAGGCACATCTCACATGGCAGTAGACAA GAGAACTTGTGCAGGGAAACTCCCCTGGAGGCATCACATTACCCGACTTC AAACTATACTCCCGCGTACCTGCCCG

>Sequence 3860

CCGGCCAGGTACGCGGGACAGCACACAGCCCGGCGCACATGAACTGCCA TTAAAGAAAAGAAATTTCAGCCCAGAATTTCATATCCAGCAAAACTAAGC ATCATAAGTGAAGGAGAAATAAGATCCTTTTCAGACAAGCAAATGCTGAG TAAATATGGAAAGAAAAGATCATCACCTGCCACTACAAAAACGCTCTGAA **GTACCT** 

>Sequence 3861

GCCCAGGCTGGAGTGCAGTGGCACAATCTTGGCTCACTGCAAGCTCCGCC TCCCGGGTTCACGCTATTCTCCTGTCTCAGCCTCCTGAGTAGCTGGGACT CGGGGTTTCACCATGTTAGCCAGGACGGTCTGGATCTCCTGACCTCGTGA CCTGCCCG

>Sequence 3862

CAAAGCAAAAACTTACAACAGATACACTAAAAATAAAAAGGGACAAATTA AAATATATATTACCTGAGAAAATTGCTTAAGCACAAAGGAGGATATTAAA AAAAAAGAGAGAGAAAAGAGAAGACATTAAGAAAGAGGGAGAAGAAGAG TGTTACCTGTTAAAAATAACATTGAATATAAATAGACCGAATTCCCCAAT AAAACATATACAGTGGTTGAATGAATTTAAAAGCAAGACTCAACTATATG CTGTCAACAAAAACTCACTTTACCTATAAAGACTCACATAGACTAAAAGT AAAGAGATGGAAAAACATATTCAATGCAAATGAAAAACCAAAAAAGAGCAG AAGTGGTTATACTTATTTCAGATGAAGTAGACTTTAAGCTAAAAACTATA AAAGGAGACAAAGAAGGTCACTGTATAATGATATTATATAATGATCATAT ATAATGATTATAAATAAATATTTATGTATAAAAAATATAAAACAAATAAT AAATCTAAAAAGAGA

>Sequence 3863

AGGTACTTTGGCCTCTCTGGGATAGAAGTTATTCAGCAGGCACACAACAG AGGCAGTTCCAGATTTCAACTGCTCATCAGATGGGCGGGGAAGATGAAGA CAGATGGTGCAGCCACAGTTCGTTTGATGTCCACCTTGGTCCCTTGGCCG AACGTTGGGGGGGTGAGTATATTTGGTGACAGTAATATGTGGCCACATC TTCATCCTGCAGGCTTGTGATGGTGAGAGTGAAATCTTTCCCAACCCCCT GCCACTGGATCGGGCAGGGACCCCGGATCTCGGGAAGATGCCCAATTAAT GATTCAGTTAGGAGGCGTGGCTGGGTTCTGTGATACCAACTAAAGGGTTT TATTGGGGGGGGATTAAAAAATTTGGGGGGCTTGCGGTGAGGGGGCC . TTTCGCCCAGAGACCAGCCGGGAGGCTGGCGATGGGGGATTGCGAGTTTC GGTGGCAGCGGATCGCGACGACCGAGATGAAGGCCTGGGGTTGGCAGC CGTGTTGGTGGCCCTGCTGGCGGTGTGCCTCCCCGGGACTTGGCCGGGCG GGGGTGTGGAATTGTGGGATCCCCGGGTTCGAGGATTT

>Sequence 3864

TTTTTTTTTTTTTTTTTCCCGGGGGAAAAAAAATTCCTTTCCCCC CCCCCCCCCCTTAAAACCCCCCTGGGGGGGTAAACCAGGAGAACCC CCTGGGCCAAAAATGGGGGGCCCCNATATCCCCCCCCGGCCCCCCTTA AAAAAAAGGGGACCCCCCCCCCCCCAGAAAATCCAAATAACACCTTTACA CCCCCCCCCGGGGGGGGCCCCCCCCCCCCCTTTTTTCCCCCTTAA AGGGGGGAAAATACCCCCCCCCCAAAAAAAGAGAAAAACTTTTCCCCCG

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# Table 3

>Sequence 3865

>Sequence 3866

AGGTACTTCCTGTAATTGGCAGCCTTGCGTTGTTCCTCATGGCATCATTC
AAGGTCATCCCTAAATTTTAACACTTTCGATGCCATATACGTTGTAACC
TTCCTTATAAGTTGCAAAATTCTGTGAATTCTGCGAGGAAGATGGGTTAA
TATTCTGTGCATTCTTTGCCACCTTCATTCGTTTCGCCTCGGCCCTTGAC
TTGTAACAGAACTCAATCAAAGCCACCAGCATTGCTCAAACCAAGGCCCCC
GGCAAGGATGTAGAATACTCCAGCAACGTTGCTCAGACTGAGGGCACTGG
TCTTTTCCTAAAGAATGTATATGAGAAGAGGTTATTAGGAAGGCAACCTG
GTGAATAGAAGAGAACACAATGTCACATAGCATTATCACGGGAACAACC
TAGTCACACAGAATGCATTTGAATTTGAGAAACAATGGATTTTCTCTTAG
ACCCGCGTACCTGCCCGGGCGGCCGCTCGA

>Sequence 3867

CCGGGCAGGTACAAAGGAACCGAGGGGGACCACCTCTGAGATGTCCTTGA CTTTGTCATAGCCTGGGGCATATTGAGCATCTCTCTCACAGCTGCCTTTC TTATCCCCATTCTTGATGTAGACCTCCTTCCGAGTCAGCTTTTTTCTCTC CTCAGACACAAACAGAGCTTTGATATCCTGTGCAGGGAGCAGCTCTTCCT CTGGACGAATAGACTGCGTCACTTCAGCTGCTCCCACCACTGTCATCTCC CCATTGCCTTTGTCACTCAGTAGATGTCCCCTAAGCCCTTCTAGAGCTAG GTTCTGGGCCAGGCATCATCTCTTCCTATTGCACCTCCTCCATGCCCC ACTTGTCTCTTGGGATCTCATCCTTATCCTCTTGCCAAGTATGTCTTACT TTGTTGCTGGCAAGTGGTAGTTGGAGGAAGCCTCAAAGCTCGAGTTGTTC CCTCCGTGCAGGGGAGACAAATGGGCCTATAAAGGACAAGGAGAACAGCA NACCAGGCCTGCTCCTCACCCCAGTCCTCCAGCCTTTCCCAGCCTTTCCT CAGGGATCTGGACGCTCTCACCTGATAGTCTGGGCCATATTCAGCTTATT CTTG

>Sequence 3868

>Sequence 3869

> Page 644 of 685 of Table 3

# Table 3

>Sequence 3870

CCGGGCAGGTACGCGGGTTCCCACGCGGTCTCTGGGCTGGTTGAGCTGCG CCGCTGCAGGTAGTGCTGAGTTGCTCCAGTGCCACTGGGTTAGGGTCTCC ACAACCGAGCTGGTCTCAGCAAGTGGTGTCCATACATGGGGCTCGAACCT GGGTTGAAGGGTCGCCAGAGCGACGGTTGGAGAACGTGGAACTAAGCTGG AGGACACCTGAGTACCT

>Sequence 3871

>Sequence 3872

>Sequence 3873

> Page 645 of 685 of Table 3

#### Table 3

AGTTCTTAAAGGCGGCATGTCTAGAGTTTGTTCCTTCTGATGTTCGGATG TGTTCACAGATTCTTCCTTCTGGTGGGGTTCGTGGTCTCGCTCAGG AGTGAAGCTGTGGACCTTCGC

>Sequence 3874

>Sequence 3875

>Sequence 3876

>Sequence 3877

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#### Table 3

GGCCTATATCCCAGTATCTCTTTACTCAATCACAGCTGTGACCCCAACTG
TTCGATTGTGTTN

>Sequence 3878

>Sequence 3880

AGGTACACCCTGAAGCAGGTAGTGAAGCTGGCAGTTGGCCACTGGTTCCC
ACAGAAAATTGCTCTAGTGATGCTAGCAAATCCCAAAATTGGGGTTCAAT
CCAGGAGGGTTCCTGGCTTCATAAAAGGAAATAATTCAAGAGCAAGCCAAG
AGTGTAAAGTGAAGGCAAAGCAAGTTTATGAGAGCAAGGAAAA
TGGCTGCTCCACAGACAGAGCAGGGCTACTCCACAGGCAAAGTAGCACCC
GTGGATTGTTGGCTAGCTATATTTATAGCTACTCCTTAATTATGTGCTAA
ATAAGAGGTCGGTTATTCATGAACTTTCTAGAAAAAAGGTTGGAGAGTTCC
CAGAACCAGGGGTTCCTTCTCTTTTTAAACTACATGAGGTAGCTTCTGGGC
ATTGCCATAGCATTTGTAAAACTTGGCGCCGGG

>Sequence 3882

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#### Table 3

>Sequence 3883

CCGGGCAGGTACGCGGGGGGCTGCATGCCAGCCAGACACCCAGTCTTGCA
AGACTGTCATTGAAAATCTCCGTTTTGCTGTTCTCCGGGTCTCTGCGTCC
AGTCTTTGTTTTGGACGGACCTGCCGGGCCATCTTTCTGCAAGAAGATA
AAGGAAGACCAGGAGTGCCTGCCGAACTCCTATGGAGGAAGTCTAGGAGA
GGAAGGGGACAGGGAGGAAGATGTTCTGCAAACCAGGAAGCAGCCTTG
CCAGACACAGGATTGGCCACAACCTTGACCCCAGACTTCCAGCCTCCAGA
ACTGAATTTCCCTGCACAGGCTCTCTTGCCTGCCACCATGTAAGACCTGC
CTCTGCTCCTCCTCACCTTCCGCCATGATTGTGAGGCCACCCAGCCAT
GTGGAACTCTCCTACTGCACTGAGAAGCACGTGTTCTCACTTTCCTTGGG
GGAGACCATTGTATTGGGCAGTTTGGAACAAAACACCATGGACTGGAGG
CTTACACAACAGAAATTTATTTCTTGCTGTTCTAGAGGCTGGGAAGCTCA
AGGTGCTGGCTGCATATTCATTCTN

>Sequence 3884

>Sequence 3885

>Sequence 3886

> Page 648 of 685 of Table 3

#### Table 3

>Sequence 3887

CCGGGCAGGTACCCCCGATGCAATGGAGCTCAACATAAAGCAGCTGGATC AGAAAATGAAATGTCTAGTTTACTTGTGATCTAGCTTAAAGTATTTGCCC CTGACTTCAAAGTCACTAAAGATCGAGATAAGAAGACTGCTTACCAGCGT GGGAACTACTCTAAAGCTGCTCAATAACGTCAGACACGTCCAGAGTGGAG AACTCTGAAAGAGCCTCTGGTGACCTGACACTGGCACTACCCATCAGCAG AGAAAAGATGGCCTCCTGTGCCTGAATGTGACAGCCAGGCAACTATGTAA GGCAGTATCAGAGAATCTTTATGACATCACAGTAGGAAAGAATTTTTTCA ACACGATAAAAATATGGTGACTCTAATAAATATCTGACTGTATTAAAAC AAAGAGTTTCTATTAATTATTAAAGACATATCTAAGAGAATGAAAAATGA CCTCTGGGTCAAGGTATCAAGACAGAACAGAAGCATCTAACTTCGTTCTC TCCCTATATTCCATTAAAAATAAAACAAAGATTCTTTTCAATAAAAT

>Sequence 3888

AGGTACTTGTGACAGGCAGACGTGATTGCAGCCACGAACACGATGAACTC ACTGAAGTCCACCTGGGCATCTCCATTGGCGTCCAGGTCCTTGAGCAATT TATCCACGGCATCCTTGTCTTTTCCACTCTGCAGGAAGCCTGGTAGCTCC TTCTCCATCAACACCTTGAGCTCCCCCTTGGTCAGGGTCTGCGTGCTGCC CTCGCTGGCCGAATATCGGGAAAAGACGTCTATGATCATGCCCATGGCTG TCTCTAGTTCCGTCATGGTGCTAGATTCAGACCCACCTTCCTCCTGGGGG CTGGCAGGCCGAGAAAATGTCCCCGCGTTCCTGCCCG

>Sequence 3889

GCGCTT

>Sequence 3890

CCGGGCAGGTACCCGGGCGTGTGAGGTGTCAGTCTGCCCCTACTTGGGGG TGCCTCCCAGTTAGGCTACTCGAGGGTCTGGGACCCACTTGAGGAGGCAG TCTGTCCGTTCTCAGATCTCCAGCTGCGTGCTGGGTGCTGGGAGAACACT ACTCCCCGCGTACCT

>Sequence 3891

CCGGGCAGGTACGCGGGAGGCATTGAGACAGCCAGCGCAGGGGCTTCTGC TGAGGGGCAGCGGAGCTTGAGGAAACCGCAGATAAGTTTTTTTCTCTT TGAAAGATAGAGATTAATACAACTACTTAAAAAATATAGTCAATAGGTTA CTAAGATATTGCTTAGCGTTAAGTTTTTAACGTAATTTTAATAGCTTAAG GAAAAAGGGTTCTAAAACATGACGGAGGTTGAGATGAAGCTTCTTCATGG AGTAAAAATGTATTTAAAAGAAAATTGAGAGAAAGGACTACAGAGCCCC GAATTAATACCAATAGAAGGCANTGCTNTTAAAATTAAAATGAAGGTGA CTTAAACAGCTTAAAGTTTAGTTAAAAAGTTGTAGGTGATTAAAATAATT TGAAGGCGATCTTTTAAAAAGAGATTAACCGAAGGTGATTAAAGACCTTA AATTCATGACGCAAGGAGAATTGGGTCATTTAAAGCCTAAGTAACCCATT TACTAAACGCAGACGAAATGGAAAGATTAATGGNAGTGGTAGGGTGAAAC CAATTGG

>Sequence 3892

CCGGGCAGGTACTGGGCCTTACAGTAACCTGAAATTCCTGATTCTTAGTC AACCTGAAATTTACAAGTAAGTTGGGTCATTAATCTTAACCATGATGCTC ACCAATATGGATGCACCTTGAGGAAATCCTAGCATTTTGTGCTTAGAGTT GGACTCTGAAGAAAATAGCCATTCCCTCGTGCTGCGACAGTTCCATTCCT ACAGCAGACTTACAACTAGGTCTAAGGCTGGCCCTAGTGAGAGGCCTGAG TGAGAGCAGGGCTCTTTGAAATTGCATGGAGAAGCAGGGTCAACCTGGCC AAGGGTTCCCCAGTCAAAGGACCT

>Sequence 3893

AGGTACCCTGGCCACTCCTTTCCTTTTGGCTGGCCAATGTCTCCTCTGTA GGCTCCAGAAGGCTCTCAGGGATGTAGGCGGCCTCCCGCAGGGTTGAGTT GCAATGGGAACAAAGACAGCTGTGGTCCCATAGCACCCTCATCTGGTGAC ATCCTGCTACTGACAGTCAAAAGAAGCCTTCCCAGATGAAATTTTAGTCC TCTGCGCAGCCATGCTCTTCTTTCAGCAAAAGAGCCCCCGCGTACCTGCC

> Page 649 of 685 of Table 3

## Table 3

CG

>Sequence 3894

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>Sequence 3895

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CCTATGAAGTTCTGACCTGCAATGTGATAGTATTTTGGAGGTAGGGCCTTT
AGAAGGTAATTAGGGCTAGATGAGATCATGTGGGTGGGGCACCCATGATG
GAATTAGTGTCCTTATAAAAAGAGGAAGAGCTGGTGTTCTCTGTCTACCA
ACTGAGGACACANGGAGAAGGCTGCCGTCTGCAGGCCAGGAAAAGAGCCC
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AGAAGTATGAAAAATAAATGTCTGG

>Sequence 3897

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CCTTCGTTCACTCCCATAACAACCAACAGCGACAACTGGCACCTAGGACA
GGGACGTGAGTGAAGGTCTGCTGGAGCAGAGAAACTGACACTGACAAGAA
GAACGAGAATGAGAAACCCTGCGACGAGTCTGCTGACAGCTGATATAAGT
CTGCAAAATCAGCTGGACCACCAAACGGCAATTGAGAGCTGCACAACCTG
CAATTACCTTTATTCAATTAATGCAAAAACAAAAATGGGGAGATGTTACA
GGTCGAAAGAATGAAGGTCGTGACCAACTCAGTATACCACTGAAGGCTAT
ATGAGCAAACAGAAAACTGTTCTCATGAAAGCAGGATGTTGGAAAACTAA
CAACTGTGTCTGCCGCCAGAAGGGTTGCTGAGGGCAGTCATGCCCCAAGC
GCAGTGTTCCTTGTGATTATCTATAGTAACATCTGAAGCCTGTTGTACCT
>Sequence 3898

>Sequence 3899

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>Sequence 3900

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# Table 3

CGACTACGTTTCTGTACCTGCCCG

>Sequence 3901

>Sequence 3902

CCGGGCAGGTACTGTGTCTGATGCTCCACACAGAAGGATGAATGGGACCA
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GGATTTGAAACAAAAGCTTTCAGGTGATCTGCAACTCTTTCACCATCTGT
AATGCGGAGATGCAGGAAGTTGGTGTTGGCCTATATCCCAGTATCTCTTT
GCTCAATCACAGCTGTGACCCCAACTGTTCGATTGTTCCAATGGGCCCC
ACCTCTTACTGCGAGCAGTCCGAGACATCGAGGTGGGAGAGGAGCTCACC
ATCTGCTACCTGGATATGCTGATGACCAGTGAGGAGCGCCGGAAGCAGCT
GAGGGACCAGTACCT

>Sequence 3903

TGCGAGCCCTCTGCCAGATCACTGGATAGCACCATGCTGCAGGCTATTGA GCGCTACATGAAACAAGCCATTGTGGACAAGGTGCCCAGTGTCTCCAGCT CTGCCCTCGTGTCTTCCTTGCACCTGCTGAAGTGCAGCTTTGACGTGGTC AAGCGCTGGGTGAATGAGGCTCAGGAGGCAGCATCCAGTGATAACATCAT GGTCCAGTACCT

>Sequence 3904

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AGCTTCTTCTGAGAGAGTCTCTAGAAGACATGATGCTACACTCAGCTTTG
GGTCTCTGCCTCTTACTCGTCACAGGTTTCTTCCAACCTTGCCATTGCAAT
AAAAAAGGAAAAGAGGCCTCCTCAGACACTCTCAAGAGGATGGGGAGATG
ACATCACTTGGGTACAATACTTGGCCGAAATCTGTCAGGTCAGCCCAACT
TTCCTTGTCGTGTCAATGCTGTGCCTCGTCCTATACCGGAGAAAAAATGG
TTCGTGGAGCCTGCGGTTATTGTTTGCCTGGGTGGAATTTTACCTTTTGG
TTCAATCTTTATTGAAATGTATTTCATCTCCACGTCTTTCTGGGCATATA
AGATCTATTATGTCTATGGCTTCATGATGCTGGTGTTATCCTGTGC
ATTGTGACTGTCTGTGTGACTATTGTTGCACAATATTTTCTACTAAATG
CAGAAGATTACCGGTGCCAATGGACCANTTTTCTTTTGCTGCATCAACT
GCAATCTATGTNTACATGTATTCCCTTTACTACTTNTTTTTAAAACAAAG
>Sequence 3905

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CTTCTGCAGCACCTGCTCCGCTTCCTTCTTCTCCTCATCTTCTTGCCTTTAA
GTTGATCAACCAGGTTCAATATGTTTGTGGAAGACGCAAAGCCGGTTTCT
GAGTCAATAATCAGTTCCAGAGCCTTTCTAAACAAATCCAGTTCATTCTC
TGCAAAATCCGTAGCCATTTTGGAAATTGAAGTTGTAGCAAGATTCACCA
ACGCATAAATGGGTCTCCCATCATCTTCCGTGACTCCTCTTTTATCTCA
ATATACAAGGGACTCCAAGACACTGTTAATGGTGTTGATGAAGTCCTCCA
ACTTATCTACGGTGGCATTGCGGTCATGGACCCTGTAGCAGTGCGTCTGC
AAGCGCTTCACGTCCCATTCCTCTAGCACGCCATTGGTCATCAGCAACTG
GAGGAAGCGCCGGTGGACATCAGTCATGACGCCCATTCTCCTTTGTGCTGC
CCTGCATGTGGGAACGAACAGGGAGCCCAAGCGCATCCCAGGCCGCCCCC
GCGTCCT

>Sequence 3906

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# Table 3

>Sequence 3907

>Sequence 3909

TCGCCACCAACGCGCTCTCCCAACCCTCGGAGTCAGTTCCAAAACCAAAC CAAAAAGGAGGAGAGCAGACAAGGCTTCAGCCTGCGACTGAGAACAGGGA GGCGGCACGCCTTGGGGAACGAGGCCCGAGGCCATACGCGCTTATACAG GCCAGTGTCGGCGTAAACTTTCTCCGTTACCGGCC

>Sequence 3910

>Sequence 3911

TGTTGGAGCTTTCAGAACGTTCCTCTTCTTGTGTAGACACGAGATACCGC TGTAACTTTACTCCATCACCAGAAACCTGTGCCTTGAGTCTAGTCTCTGC

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## Table 3

>Sequence 3912

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TTATCAAACACTGCAATTTTAGATCTCCTGAAAAAACTCTTTAGTGGAGCC
AGAGTCTAATGTTCCATAGGCAATTTCTGTTTGCTTAGAAAGATCCTCAG
CACTTTCGATGGGAGACACCATCCTCTCTACAGTCAGGAAGGCAGCTAAG
TTAGCCGTGTAGGAGGAGATTATGATCAGGGTAAAGAACCACCACACCC
TCCAACAATGCGCCCAGAGAGGGATCTAATAACAAGTATGAAATGGATTT
GTAAAGTGAAATGACTAATAAAAAAAACAAGTTAGCAGTATTATGC
AAATATTGACTTATAGGGGAATATTTAATTTTATATTTTTCAATGTATCT
ACTAGTTAATGAAACTGGAAATCATTAAACATTTTGGGCAAGGAGTACAG
CCGGAAACCTCGCAGCCGCTTCCTGCAGTCCAC

>Sequence 3914

AGGTACCATAGCCAAATCTGGGACAAGCGAGTTTTTAAACAAAATGACTG
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GTCGGTTTCTATTCCGCCTTCCTTGTAGCAGATAAGGTTATTGTCACTTC
AAAACACAACAACGATACCCAGCACATCTGGGAGTCTGACTCCAATGAAT
TTTCTGTAATTGCTGACCCAAGAGGAAACACTCTAGGACGGGGAACGACA
ATTACGTGAGTATGACCAATTCCTTATAAGAATTAATAGTCATGGTGAGG
ATCTTGACTCTCCAGTTCTATTCTCTGAGCAAATGACTTATTCTGGGCCT
TAATTTTCCTGCCTTATAAAAATGAGGAAACAGACTGTTGTCACTTGAAG
AAATGTTTGAGGACCTGCAAAGGGCCAGGCACAAAGGTTTGTGATTGCTG
TTGTACCTGCCCG

>Sequence 3915

CCGGGCAGGTACATCATTTCCAGAGCAGGCACTGGCGGCGAGATAGGGTT GGAGGAGAAGTAGCGCCGGGACTTCCGGATGGCAAACTTCTCTGTGGGTA GAGATTTCCCAGCAATCTTGAGCTTCAGGCCTGGCACAGCTCGAAATAAT TCCACTTCGTCGTCCCCGAACGGCTTGTGGTCCTCCTTCCCAAACATGCT GAGGTAGGCGGCCTTCATGTAAATGTAGGTGGCCTTTTTAAGTCAGATCA TGTCAGTTCCTTCTGGAAATCTGGTTATATTCCATCACACTCAGGAGACA TCTCCTACAATTTCCTTGACACCTGCAGCACTCCAGCCACCACGACGGCCT CAGGGCCCCGCGTACCT

>Sequence 3916

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TTCTCAGGAACTCTCCTTCTTTGGGGAGCCTCAGATGGGAAGGGACTCGA
GCCCCACCTGTCCCTGGACTCTGGAATGCCACGGAATTAACCCGAGCAGG
CATGGAGGCCTCTGCTCTCACCTCATCAGCAGTGACCAGTGTGGCCAAAG
TGGTCAGGGTGGCCTCTGCCTTGCCGTAGTTTTTGCCCCTGGGGGCTCAC
CGTGTGGGGGAGCAAATCATGTATATCCAGTGCTGTGAGTGGCTCCAGTC
ATGGAGGAGCAAGGATGAGTTCTGCCTGGAAGAATCTGGGAAGGCTTCCT
GGAGGAGGAACAATGGCATGGACCTTGAAGAGTCAGAAGCTTTCAATTC
ATTCCATTCAAGCATTGCTCTCATGTGGCATTCAAGCATTCTATAGTGCT
TGCCGTGACTCANGCGCACAGTGCANAAGGAAGCACTCTTTCCTCTCCCA
TGAGGACTTATTAGTGTCTGAAGAGCTNTTTCTGGACTATAGGAGAAAGT
CATGGTCTCCCTCACTAATAAACACTGACCCTGCTTCGGATGAGCTAACA
GC

>Sequence 3917

AGGTACGAGATGCCACGGCACGAAGTCTACGTTCTCCTGATCCGAAACAT CTTTTTGAAAATATCAATCATTGGCATTCTTTGTTACTATTGGCTCAACA CCGTGGCCCTGTCTGGTGAAGAGTGTTGGGAAACCCTCATCGACCAGGAC

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# Table 3

ATCTACCGGCTCCTTCTGATGGATTTTGTGTTCTCTTTAGTCAATTCCTT
CCTGGGGGAGTTTCTGAGGAGAATCATTGGGATGCAACTGATCACAAGTC
TTGGCCTTCAGGAGTTTGACATTGCCAGGAACGTTCTAGAACTGATCTAT
GCACAAACTCTGGTGTGGATTGGCATCTTCTTCTGTCCCCTGCTGCCCTT
TATCCAAATGATTATGCTTTTCATCATGTTCTACTCCAAAAAATATCAGCC
TGATGATGAATTTCCAGCCTCCGAGCAAAGCCTGGCGGGCCTCACAGATG
ATGACTTTCTTCATCTTCTTGCTCTTTTTTCCCATCCTTCACCGGGGTCTT
GTGCACCCTGGCCATCACCATCTTGAGATTGAAGCCTTCAGCTGACTGTG
GCCCT

>Sequence 3918

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AGACTAAGGAGTGCTGCCATCAGACCAGCCCCATCTCATGTGCAAGACTG
CCCAGCCTCCAGAGATCAGGTCTCAGAGGAGAACTCTCTCAAAAGTGAAC
CCCTGGTCCGCCTCAGACACTCTGAAGCCCTAAGGCTGAAATGCCTGGGT
CGCCCAAACAGCAAAGATGACAATCTGGTCCTCCCCCTGGGAGCTCTGAC
TCAGTGAGGCCTGAGACCTCTGTCGGCCAGAGAACAGCAGTCAAGGTAGC
CAGA

>Sequence 3919

>Sequence 3920

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CTACGCTATCTACAATGAAGATAAATTAATGGCCAAAGCACTGCTCTTAT
ACGGTGCTGATATCGAATCAAAAAAACAAGCATGGCCTCACACCACTGCTA
CTTGGTGTACGCGGGGAAATATCGCCATCGGCATTCCCCCTACGTTATT
TGGAGAGTGAATTTCAGCCTGAGAGGGAATAAGTAAGATACAGTGAAAT
GTGAATAGATCATGTTTTTTTAATTTGAATTATGTATTCTTTTTTCTCT
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>Sequence 3921

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GGAGTTCACAAGGGAAACAAGGGTAAGAATTAAACTTCACTAATATTTCT
CACCCTCCAAAGCCACTTCAACCACTGCCTTTCTCATTTCGGTTAATAGC
AACTCCAATCTTCCAGCAGGTTTAGGCTGCAAAACCTTAGCTCCTCTCTG
TCTTACACTTCACATCCAATCTGTCACCTATTCAAAGTATCCCCCAAATC
GAGCAATTTCTCACCATCTCTTACTAATACACCTCAGGTCCAAACCACCA
GTATACCTCCCTAGAGTACCTGCCCG

>Sequence 3922

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ATGTCCACTGAGTCCATGACCACAAAGCAAATCACCAGCAGCAGGATGGC
ATGGGCGCCCTTTTCGCTGGGGAGGGACTGGAGCAGAGGCTGGGGCTGT
GAAGGTGATGGGATCACCTCTGATGGTTAAACAAGAGTACCTGCCCGGAC
CTGCCCG

>Sequence 3923

CCGCCCGGGCAGGTACAGAAAGAGGTTTGTCTGACTTAAAGTGATTTGTC ATCTTTCTTTTCCACTCTCCTAATCATGATCTGTTCCCCCTCCTGGCCCA ATAACTTAATGCTTGTATAACTGAGGTCCACCCATTTATGGAAAACTCTT

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## Table 3

TTAATCACATGAGTCTCCCTTAACACCCTTCCTTTTGTCCCCTGGTGACA
AATGTATTTGGAAAATATTCATGTTTGAAATCCGCCTTTTAAAAGCGGTC
GGTTCCCATAGTTGGACCTAAAATGGGGGTAGGCAAGATGAAACAAGCTA
ATTTAAAAAAAGGGATATAAGTAAGATTAAAAATTAGAGCAACAACAAGGA
AAAATTCGTTCTTTTAGGATGCCAATCTATTAACAGAGGAAAACGAATTA
GGTTTTTTTTAATTAAAAAAAAAGCTGGGTTTTGTTTCAAATTTAACAACA
ATTATTGTCCCATTATTTTTTCACCTTGAAAATTCAACGAGGTGCATTCC
AATTTTAATTTGGGAAAAGATTGGCTCAAAAAACCTTTTTTATTGTTATTCA
ACCCCAAGTAAAAAGGAAAAAATAAAT

>Sequence 3924

AGGTACTTCAGCTCCACCACGGTGCAGGACAGCTCCTCGTCCCGGAAGTA
AGGTATAGTCAGGTGATGCAAACTCATCATGGGCACCATTACCCACTTTT
TCTTGCTCAAGTAGAACCTTGACTGATGAGTATCTTGGGGGTCAAAGGGC
ATCCCCCATTTGGCTTTAAAGAAGATGTAATTCACCAGGACCATCATTGT
CTGCGAGTCAAGGTCCTTGATCAGATCTGTGATTTTCCCCCTAGTTCCAT
TCTTCACGTAGTCGTTGATGAGCTTCTTAGCTGCAGCTGAGTCCTGAAAG
TCACCCGCGTACCTGCCCG

>Sequence 3925

AGGACGCGGGCCTTTTCACAAGATGGCGCCGAAAGCGAATAAGGAAGCT CCTGCCCCTTCTAAAGCTGAAGCCAAAGCGAAGGCTTTAAAGGCCAAGAA GGCAGTGTAGAAAGGTGTCCACATCCACAAAAAGAAGAATATCCGTACGT CACCCACCTTATGGTAGCCGGTTCTAG

>Sequence 3926

AGGTACAGAAGATGATTGACCTGGAGACACCATCCACCCGGATTTCTTCT
CACAACTTGATCAAAAATGGCCTCTAAGCCTAAGTCCACGGCATCCCCAC
AATGGATGTTAAGGTTCTCAAAGGGAACAGCTCGGATCTGGTGTTGAAGA
ATGTCAGTTAATGTTTCCAAGTCCAATTTGTTCCTAGACTTCTTATAGCC
AATTCTTTCAAGATATGCTTCAATGTCCATGATCCCCTTTCTTAGTAAGT
TGAAAGTAGGTTGATCTTCAGTTTTAATCCAGAAGACAGATTGCTGCTTC
TTCCTGGCTTGAATTCAGGTTATTTCAGCCGGCAACCAGGAACTAGACTG

AATGCAATCCTCCCACATCCAAGGTCCCCCGCGTACCTGCCCG
>Sequence 3928

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TCTGCAGAGCCAGATCAACCCCACAGCCTGTGAGCCAGGCCTTAAGCTGC
CTATTTGTGCTGAAGCGGGCTGCAGAACGACCCGTGTTATCCACCCTGAG
CACCACCAACACTAAGCACAAATGACAACACCATCTCACCTGAACCCTGT
CCAACTCACAGCTGCCTCACTGGCCTTTGCCACTGCCCTCTCTGATGGAG
CAAGGGTCTGGCCTTCCAAGCAAATGTCAGCCTCAGATTCAAAAGACACA
TAGGAAGGAGCAACACCCAACACACTGAAAACTCCTGCCCGATCCACAAA
GACCCCAGTGCAAGCGATGGGCAGCATCAGATTGATGGAAACCACCCT
TTCATTTAGAATTTTTATGCACACGAGTAAC

>Sequence 3929

AGGTACTTTTTTTTTTTTTTTTTTTTTTTTTTTTCAGCCCCAAAGGGGC
AAAAAGAGACTTTAATTAGGGGAGGAGGAGGATCCGCCAAAATCAGAAAAGG
GACAGCTAGCGTGGGAGCAGAGGAGCCAGAACAGGCAGGAGGAGGACCCG
GCCAGGAAGCTTTGGAGGAATTACCTTGCCACCTTTGGCACAGGCACTGA
CACTGACGGACAAGGCGAAACAGCGGCCCCTCTCAACTGGGAGGGCACCC
AATGGCCCCCCCGCGTACCTGCCCG

>Sequence 3930

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## Table 3

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>Sequence 3931

>Sequence 3932

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>Sequence 3933

>Sequence 3934

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ACAACATGAATCTGCATTTCTTGGATGAAATAGTTAATAACAAACTATTT
TTCAATATTTGTATTCCTAAAAAACTTTTTTTGAAGGTGGTAATTGTGTTT
TCAAAAATTCTTATTCTTCTTATTTTGGAACCATGGGTGTTTTCTTGAAA
GGGCAGCCCTTATTATAATTAAAATTAAAGTGGCTTATTGTACGTAAAA
ATGAAGGCACTTGTTCCTTTGGCCTTGGGGACCTGCTCTTATTTAAAAAA
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TTACTTTTCTTCACCAATTTTTTTGGGAAAGTTTGGGAAAAAAGCCCAAAA
AAATGAAGGTATTGCCCCAGTTATGGCCTTAGCCTTTCTT
>Sequence 3935

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#### Table 3

CACACCACCCCAGCTATGGTAGCCTTGATAAGAGAATCCAACTCTTCA
>Sequence 3937

>Sequence 3938

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GAACAACTTAACCTCCATGAGGCTTTGTGAAGTCAGCTGTGACCACCCTC
CTCTTACTGTGTTCTCAGTATTCATTCACTTCCAGGGAAGAATGACAGCC
ACAGGGAGATGGTGGTGGGCAAGAATGAGAGTCCCAGGATCCAGATTTAG
CCTCAGATCTTCCCCATTCAGGAAGGGTTTTCCATTTAACAAGAGCACTA
GTATGAAAACATTAGGGACAAATCTCCCATGTCTTTGAAATTCGGATTCT
CCTCTTGAGATCCCCTTCCTCACCTGCCAATCAACTTTATAAGGCCACAA
STGGTCACTGGTTTTCCTTCACAGGTTTTGAGGTTCTCCTTAA
>Sequence 3939

>Sequence 3940

CCGGGCAGGTACACGTAAAGCTTGGCTAAGCAGACGCATCAGGAGCAAACCATTTGTGTCACCAATCTGTCTCGGCAAGTCCCAGGGCCACTATCTTGC

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#### Table 3

TAGAAGCCACTGTGTGCTTTTGAAAGCATGAAATTAGTTTTATACTGAGC ACATGGTTTCTCGTTTAGCAGCTCTTTTTATGGTAATGGTCAATTTATGG TTCACTGCCAGGATTTCGGTGTACCT

>Sequence 3943

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TTGCCGGGAGCAAAGGGACAGAAAAGCTGAGATGAACAGTGCCTGGCAGC
AATCACAGCCGGGCAAGGGGTGCTTCCGAGCCTCGCATCCCC

>Sequence 3944

>Sequence 3945

GGCAGTTGAAGGCCTTCAGAGCAAAACTGAGGTTTCTCGGTCATGCGGTT ATGTCTTCAACACCTGCGTCCCCCACCGGAGGCCAGCTCCCAGGGCGCGT TCTAGTGTGGGCGTTCGCTTCATATTCCCAGGCGTCGCTTGCCCCAGCA CGCCTGTGTGCTCAGTAACAATGTGTTAAGCACAGGATTTTGGGAGAAGT GTATATGGACGTCTGAAGAAGGGTTGTGCTTGTGGAAGAGCCCCGCGTAC CT

>Sequence 3947

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CATGAACCCTGATGTGAACTGCTCATCTGAGGGATCTATGTTGTGTGCTT
CATATGAGAATCTAATGCCTGATGATATGTCACTGTCTCACTTTGCCCCC
AGATGAGACCATCTAGTTGCAGAAAAATAAGCTCAGAGTTTCCACGGATT
CTACATTATGATTTGATCTTCAACAAAGCTGATACTGGGGAAAGGACACA
CTCTTCAATAAATGGTGCTGGGAAAATTGGATAGCCACATCCAGAAAAAT
GAAACTGAACACACACTATCTCACTATATACAAGAATCAACTCAAAGTAGATT
AAAAACTTAAACAGAAGACCTGAAACTATAAAAATTATGACTAACA
CCTCANAAGCCACAAGCAACACAAATAAAAATAGACAAATTGACTAACA
CCTCANAAGCCACAAGCAACACAAATAAAAATAGACAAATGGGACTTAAT
TAACTTAGAAAGCTTCTGAGCAGCAGAAGAAATAATCAGCAGAGTGAAGA
GACAACCTNCTGAATGGAAGAANATATTTGCAAACTGTTCATCTAATAGT
GGACTAATACCTAGAATTACCAAAAACC

>Sequence 3948

AGTACGCGGGCTTAGACCTGACGCTGGGAGGAGATGCTGCCACCTAGG
TTACTTGTAGGACCCTATACGGCAACCTCCTTTGCCÁGGAACTATTTATA
AACATCCTGCAGGAAAATGAGTCTATATGTCAGAATACACATTTCCCACC
TTGCCCAACAGTAGAAAAACATAAGAAGAGAAAAAACATTAAAAAATGACA
AGGAAGTTAATGGAAGTCAGCAATGTGATGGTGTTTTGGAGGTGGAGCCTT
CAGAAGGTAATTAATGCCCTTGTAAGAAGAGGCCAGAGAGCTTGCGCACC
TTCTTCCTGCCATGTGAGGAGCCAAGAAGCCGGCTGTCTGCAACCTGCAA

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#### Table 3

>Sequence 3950

TAGTCCTCACAAACACAGAGGGCTCCGCACTCCGCATGTAGGTCCACATT
TTATCAAACACTGCAATTTTAGATCTCCTGAAAAAACTCTTTAGTGGAGCC
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CACTTTCGATGGGAGACACCATCCTCTCTACAGTCAGGAAGGCAGCTAAG
TTAGCCGTGTAGGAGGAGATTATGATCAGGGTAAAGAACCACCACACAC
CCCAACAATGCGCCCAGAGAGGGATCTAATAACAAGTATGAAATGGATTT
GTAAAGTGAAATGAACTGACATATAAAAAAACAAGTTAGCAGTATTATGC
AAATATTGACTTATAGGGGAATATTTAATTTTATATTTTTCAATGTATCT
ACTAGTTAATGAAACTGGAAATCATTAAACATTTTGGGCAAGGAGTACCT
>Sequence 3951

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# Table 3

AATTCTGTCTACATGTTTGGAAGAAAAAAATATGTTGCATCTGTAGAGAAGTGTGCCT

>Sequence 3953

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>Sequence 3954

>Sequence 3955

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>Sequence 3957

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#### Table 3

AGGTACTTCCTGTAATTGACAGCCTTGCCTTGTTCCTCATGGCATCATTC AAGGTCATCTTAAATGAGAGAGGGGGGAAAGAAAGAAAAAGAAATCATAC GTTATGGTTTTCAAATGCATCCAGAGGAAGGCAGGGTTGTTTTTGAAAAG TTTACTTCTATCTGAAAGCTTCTAGCAAATGAAAGCAAACAGTGCAAAGC TGAACTACAAATAATAAAGCACAATTATGGCAGGAATCTGTCCACATTCA CCCAAGCTACTGTGCCATTAAAGAGGAAAATAGACAGTTGAGCTGCATGT TCCATTGGCCACCTTCCTTATTTAAAAGAGCTTAAGGACACAACAAGAAA GCTTAACGTGCACTAAAAAGTTTGTATTAGAGCCTCGTTCCTACCCCCTA CAAAATTCTGTGAATTCTGCGAGGAAGATGGGTTAATATTCTGTGCATTC TTTGCCACCTTCATTCGTTTCGCCTCGGCCCTTGACTTGTAACAGAACTC AATCAAAGCCACCAGCATTGCCAAACCAAAGCCCCCGACANGGATGTAGA ATACTCCAACAACGTTGCTCAGACTGANGGCACCCGTCTTTTTCTAAAGA TGTATATAGAAGAGGTATTTAGAAGCAAACTGTTGATAGAAGAGACACAA TGTCACATGCATTATACGGAACAACCTATACACAGATGCATTGATTTGAG AACAATGATTTCTCTT

>Sequence 3958

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>Sequence 3959 >Sequence 3960

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> Page 661 of 685 of Table 3

## Table 3

>Sequence 3962

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>Sequence 3964

>Sequence 3965

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#### Table 3

GTATGGGGAAGGGAGTAAGCGTTGAATGACAAAAGAAAAATCAGAGTGAA GATAAAGGAGAAAGAATGAGAACCCGCGTACCTGCCCG >Sequence 3966

CCGGGCAGGTACAGTGGCACAATCATAGCTTAGTGCAGCCTCATTCTCTT GGGCACAAGCGCTCCTCAGCCTCCTCAGCCTCCCAGTTGCTGGAAC TTACAGGTGCACCACCATAACCAGCTAGTTTTATTTTTTTGTAGAGACAGA AGTCTCACTTTTTTTCCTAGACTTGTCTGAAATAGACCATTCTATTTGCT AGAATGGTCTCAAACCATCCTTCTGCCTCAGCCTCCCAAATTGCTGGAAT TTCAGGCATAATTCATCATGCCTAGCCATTTCTTTTTTTCTGCTGCATTGT AGAGTTAGAACCAATTTCATTTGTCCTGCACTGAGAATGTGCATTCCCAG, GGGTGCACAGTTACTAACTGTCAGCGTTGCACAGCCACCTTTAGCAGGTA TGTTCAGAACTTACATTCCCACCCTTTCTAAAACAGCTCACAATAACAAG AGAACGGGATTTAACTTTTGACATGGACACTCATGAAAACCAATGATTTT GGAAAGCCAAATGGTGGAGAAGAATAAGTGGGGGATCTGACTACTAGTAT TTTTACAAATCTGAATGTCGTGGAAGGTTCGGTTTAATTTGGTGGGGTAA TGCTGAGAATGGAAAATAAAATGGGAATATTGGCCCTTGGGGTACTTTTT GGTTTGGTACATTGCGAGTGGGGCACATTTTTCTTTATTTTAAAATTAAA AGTTGTGGCCCGGGGTTTCTTGTGGTGAATAAAAANGAAACTTTTGCTTA AAGGTTTTTGGAAAAGCTTN

>Sequence 3967

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>Sequence 3968

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TAGTCCTCACAAACACAGAGGGCTCCGCACTCCGCATGTAGGTCCACATT TTATCAAACACTGCAATTTTAGATCTCCTGAAAAACTCTTTAGTGGAGCC AGAGTCTAATGTTCCATAAGCAATTTCTGTTTGCTTAGAAAGATCCTCAG CACTTTCGATGGGAGACACCATCCTCTCTACAGTCAGGAAGGCAGCTAAG TTAGCCGTGTAGGAGGAGATTATGATCAGGGTAAAGAACCACCACACACC TCCAACAATGCGCCCAGAGAGGGATCTAATAACAAGTATGAAATGGATTT GTAAAGTGAAATGAATGACCTAATAAAAAAAAACAAGTTAGCAGTATTATGC AAATATTGACTTATAGGGGAATATTTAATTTTATATTTTTCAATGTATCT ACTAGTTAATGAAACTGGAAATCATTAAACATTTTGGG

>Sequence 3970

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## Table 3

GAGGTAGGCGGCCTTCATGTAAATGTAGGTGGCCTTGGACCAGCAGTTCT CCTTGCTGAGCAGGTCGGCGTAAAAGTAGGACATCTTCCACTGGCCCTTG TAGGTGAAGCAGCAGTTCCGGGCTGGAAGACAGAGACAGCTGGACAGAGC TCCTGAAAACATTTCAAAATACCCCCCCCCGCGTACCT

>Sequence 3971

>Sequence 3972

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GTGTGCGCGGGCTTCATTCTTGAAGTCAGTGAGACGAAGAACCCACCAACT
CCAGACACATTTTGGCGACCTAGATGGGACAATCGCCTATCACCGAGTGG
TGAGACCATCGCCTATAGCTGAGCGGCGAGGCAATCACCTATCCGCAAGC
AGCTCCAGAAGCAGATGAGCAGATGAGGAGACGCCTCTATTCCGTGTCGT
TTAGAATGAGCAAACAGTTGTCTTCACCATCCCAGACAAGCAGATGAATG
GTGAAACGATACAGCAGAGAAGAAGAAGAAGAAGAACATTTGAACGCCGAG
AGGAGTTCAGCCGAGGGTGGTCGGAGAGAGTTTTGCCACCCAGCAGCAGAAGA
TTATCTTNCCGTGCCATCCCCGCTTCCAGCTCTGCATCCATCCTTCAGAG
AA

>Sequence 3973

>Sequence 3974

>Sequence 3975

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> Page 664 of 685 of Table 3

#### Table 3

AGGTACTGGCTTTGGTGCCTTGTCTACCAGGCAGTTGAGTTGGTTACTGC TGGTGCCTTTGTGGGCAAAACTAGGTTGTAAAAGCAGCCAAAAAATTTCC AGATGGGAGAGTTTCATAGCGGGCATATTTTGGCTTGTGAATTGACTGTT ATGTCTCAAGGTAGTCTCTTGGTGGGAGAGAGTTCTGCTCTGTAGCGTCT AACTAAGAGCACATAGTTAGATGAACTTGCCCTGTTGGGAGTGTCTGGTG AAGGGGAGATAAAAGATTATAATTGCATTTCTAAAGAGCTAAGTAGGAAG CAGAGAAAAGGAGAGAGAGAGAGACAGAATAATTTTAAATAATGAAGA GAGAAATGAAGAAGGAATAATTTTCCTGCTTTTCCATTGGTTCTTTGGAC ATAACAGGCAAAAGTGTCAATCAAGGTGAGACTGTTCCTTCAGGGCAGAA ATCAGACAAGTGTCCTGAAACTCTGCCTTCATTTGGGGGGGCAACCATTTG GCCATGTTCCCCACTGTCAGTGAGAATGAATAACTCTGCTGGTGGCTGCA AAAGCCTTTGAAACCTGTCAGGAAAGGACATTAATTAAAGGCCCATAATG CTAGGATGAAGCTCTTTTCCTATTTGCTACTTTTGATTAATGGCCTGAAT GGTGGGCATCTTCCCTAACATGAGAAGATTAGTCAATGGGCACCTTTTAT GGGGTTGCCCCAGCCTGATAATCCCCCCTTTTACCTTACTTTTGACGGTT GAACTTTCTTGGTTAATAGATACTTAGGGAAATGT >Sequence 3977

AGGTACAGTCGCCCTCATTATTCATGGATTCTGTATTTGCAAATTCGCT GACTTACTGACGTTTATTTGTAACCTTCGAGTCAACACTCACGGTGCTTT CTCAGTCCTTTGCAGACGTGTGGAATGCAAAAAAATTTGAGTTATATGAC GTATATGTTCCCAGCTGAGGCTGAGCAAGGCTCACTTCTCCTTGCAGCCC TCAGACTATAAACAAGTGTCCCTCTTGCTATCTACTTCGTGTTATGATTT TTGCATTTTCATAATCCCTGTTGATGATTTTTGCTGTTTAAAATGGCCCCT AAGCACGGTCCTGAAGTACCTGCCCG

>Sequence 3978

>Sequence 3979

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TCCTGAGCCAGCGAGACCACGAACCCCACCAGAAGGAAGAATCTTGTGAAC
ACATCCGAACATCAGAAGGAACAAACTCTAGACATGCCGCCTTTAAGAAC
TGCAACACTCACTGCGAGTGTCCGCGGCTTCATTCTTGAAGTCAGTGAGA
CGAAGAACCCACCAATTCCAGACACATTTTGGCGACCTAGATGGGACAAT
CGCCTATCACCGAGTGGTGAGACCATCGCCTATAGCTGAGCGGCGAGACA
ATCACCTATCGCCAAGCAACAAGCAGATGAATGGTGAAACGATACAGCNG
AGAAAGAGAGAAGAGAACATTTGAACGCCGAGAGGAGTTCANCCGANGG
TGGTCGGAGAGGATTTTGGCCACCCAGCAGGAAGATTATCTTCCCGTGCCAT

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## Table 3

>Sequence 3980

CCGGCCAGGTACACCACACAATGGTGACACAGCCTAATGTGTGGTCAGCG TGTGCCACGTTTTCTGCACTATACCCATGTCTGATGGCTAGATGTGCACT TCTGAAACTGTTTCTACAGGGTTCTTCGTTATCCACAGAAACATAAAAGA ATTACTCCTACTAATTCCTGTCTCAGACTGAATCTTTATGACTATAAATA TATAAACGATCAGACGGCGAGCATGCATATTTTGCCTAAGCTGCCTATTG CTAAATGCGTCATCACTACTGACCTTTTCTTTCTATGCCCTGCTCCCAGA TTTCAAACTTAGCACTTACATGCTCACCACTAGCAGAAAGGGATTTCCAG GGACCAGAATCTCAGAGAAAAGGAAGGTTCATTCAAACATAACTGGTGCT GAATCCTTGCAGCTGAAAATTATCTTGCCAGTATATATGCTGGCCCTTCA TTTAAAATGAACTTGCAGTTTATTAAAAGCCATCAAAAAGCTCTGGATCT TATTTTCAAAACCATAATATTCTCCCATTTTTAATTTGACAGACTTTAGC GGACAGTTACTTCTAAAGATTTTTCTTTCAAAAGCTGTGCCAAGCCTATA TTTATTCCCCTGAACACCTGGGTCATCATACCCCTTGCGTTCGTATAATC CAACCCTCAATGTCTATACCGGATTTGCTCATCTACCAGGTCTGGCATTT TTACTAGACACACTGCACACTGGGTCGATATCTATTAAAATACACACAAT CTCAGCCATATCCATGCTTGACTACCGGAGATGCAATCCT

>Sequence 3981

AGGTACCATCGGACCCCTTTCGCTTGCTATTCTGTCCTGTCTTTGCTTAG AGTTCGGGGGCTAAATACTGGGCACCTGTCGGCCAGTTAAAAGTGACTAG CGCGGCTGCCGGACTAAAGACAAGGGTGTCAGGCTTTCTGGGAAAGGGCT TTCTAACAACTCCCGACTCTTCGGTGTTGAGGCCATTGGTTTGCCTAGAA CCAGCTTTTGCTTTTCCTGTACCTGCCCG

>Sequence 3982

>Sequence 3983

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#### Table 3

>Sequence 3985

>Sequence 3986

CCGGGCAGGTACAGGTTTGGGCCCAGAGGCCTGACAGGAAGGGCAGTAGG AGAGGTGGTCGTAGATGATGGGCCAGAGGGCGCAGGGCCTAGCAGGCCAT GGAAAGGACTCTAGGTTTTACGCTAGGTAAAATGAGGAGGCACTGCAGGG TCCTACCAGCTGCTAAGTTAAGAATAATTTCCAGTGAGGGCTTTTGTAGT AAATTAGAGATGATGCTGGTTTGTCAATCTCCCCTTCCAGCAGAGGAATG TGTGGGTAAGAGAGTCACAATTGTTTCTGAACAAAGCCATAGCTCCTAAA TGGTGAACCTGGGCCTATAGCCTCTGTTTCCTGACAGCTGGCCTTGGTCG TGCGACTTAATTACCTTAGTATATTTATATACAAAGTAATCCGTGCGGTT TGTTTAATATTAATATTATGACTATATTATTACACTATATATTTTATAGA TGGATCCGTCGACACCCTAACTATTGAGTTACTTTAGTGAAGTGGGATAT AGGTATAAAGTTGACGAAATAAAATGATGATATGAGTTAAGAGACTATGT GAAATTTGTGTCACAAAATCAAGAAGTGTTTTCCTATTATCTACTATAAT TTATATATATATATATGATGGAGAATGTGTGTGATAAATAGTAATTAA ATTGGGATAAATTTAAGGATTGGGTATTAAGCGAGCATATTGTTGAGAGC TTGATATGAATATGTAGTATTACG

>Sequence 3987

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TAGATTTTTGCTAGAGCTTGTCTGAATAAATGTGGGCAATTTCTAAACCC
CTGAGTTAGGACTGACCAGGATGAAGTTAATAGATAAAGATTTAGGTAGC
TTTCCCAGGAGAAACAGGGCTATTAAAGGGAAAGATGAATTCAGAGATCA
TGTGAATATTAAGCAGACACCCATCTTGGAAAGTATATTTTTTGCACCAAA
GAGGTGTGGGATATTTAGACATTCATTACCCAGGGACTGATGGGAGAATG
GTAATTGGTCCCTTAAATAATATAAAGGAGTGTGAATCTTTTCTTTTGGA
GGGAAGTGGTGCCATTTGCCCCCATTACCTGGCAGGATTCGGAGGAGAGT
TGTTTAGAAAAGATTAGCACAGAGTACGCAGCTCTTAAACCCAGAGGGAA
ATTTATAATTTTACTTGCCACCAGAAGTGCCCTTGGCTTTGTTCTGT
NGATGGTGAGGTCTGATTTGGAAACTGGCCAGAGCGTAGAGCTCCTTCAG
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CAGGCAGCCCCCGTTCCAGTACCTGCCG
>Sequence 3988

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## Table 3

ATGTACGCGGGGGAGAGTAGTGGTTCTCGCAGCACCCAGCACGCAGCTG GAGATCTGAGAACGGACAGACTGCCTGCTGAAGTGGGTCCCAGACCCTCG AGTAGCCTAACTGGTAGGCACCCTCAGGTGGGGCAGACTGACACCTCACA CGCCCGGGTACCTGCCCGGGCGGCGCCTCGA >Sequence 3991

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TAAGAAAAAGGAAAGTGAATTAATGCTTTCGAAAGAGACATTAAAGTAGA
TCTGTGGGCAATATGAAACTGATAGTCAATCTCGTCAGATTCTGAACGCA
TCTGTAGAATAAGCTATCCAATGAAAAACAAGGCAGTGACAATACGACAAC
TAGAAGTAAAGCTATAATTATAGCAAAGAAGGCAAGAGCTAGCATAAACTT
GCCTATTGTCATTGTTGAAGTCATAGAACTACTCCTTTCAACTACTCTTG
TCATCAGATGCTTCCTGATGCGATCATCTGTGGTGAGGATAGCTTTTCGA
GCCCCATCCCACTTTCCAGGGCCCTGTACCTGCCCG
>Sequence 3993

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CTAAGCTCTTACACACAGTTGCAGATGAAAGAGGGAATTGCTTGACATGG
CCACAGGAGCATGCAGCTTCCTGCAGACATGACAGTCAACGCAAACTCAT
GTCACTGTGGGCAGACACATGTTTGCAAAGAGACTCAGAGCCAGACAAGC
ACACTCAATGTGCTTTGCCCAAATTTACCCATTAGGTAAATCTTCCCTTC
TCCCAAGAAGAGAGTGGAGAGAGCATGAGTCCTCACATGGAAACTTGAAG
TCAGGGAAATGGATGCTCACCAATTATTTGTGCATGGGTTGAAGTATTCC
TTGAAATTAAGATCAGGTGTGTCTTTGTGTTTACCAATTAATGACCAGAG
GGTAGATAGAAGTATGCTGGATGGCGCAGGCGTGTATGAGAATGTAAAAA
CAGGTTTCTTGTCCCGGGCGGCCCCGGTTATAGA

AGGTACTTTNTTTTTTTTTTTTTTTTTTTTTTTCCATAACAAAGCTCAAGT

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## Table 3

GTTTATTAAGAATTAAAAATACTGTAAATAAGCCATACAGTTCATTTCAC TTTTTTTCCAATTTTTTTGGGAAGGCCAAGACAGCCTTTAAAGAACAATC CAGCTCAGAGGGAAGGGAGATACAGCAAACAATTACACAAACGCAGTTTG CACGCTCCTTGCCGACAGGGCTGCCCAAACGGCAAACCTTTTCATGGACA TCATGTTAAAATAAAAGGACTGGGCCTGCATTCCCCAGGGAGACCCCCTA TTCCACTGTAGACAGCTTTCCTAACGAATTTTTTGAAAGAACCCAAGGAC TCCCCTTTCTGGTAGTCGAAACCTGTGCATTCCTTGGGGACCTCCGGAGA GAGAACATGGGCCGGCAGTGGGGACAGAGGGCACCGGGACTCTGCTGGGT GTAGGGCTTCACATTCAGAACCGCCTGGATGCTTTGCAATAGTACCTTTG ATATCACAAGATGCGTCAGGAAGAAAAACTACCCCCACACCATGAGGGAG GCAGCCCTAAGCAGGGGTTTCCTTTTAAAGAAAGACCCAGGGGCTTTCC CCTTCTTATTCAGAGCTGAAGCTATGAACTTTACCGGGTCAAAATGAAGA ACCCGGTACCTGCCGGGGGGGGGGTTTAAACTAGGGAATCCCCGGCTGAGG AATTGATATAAGTTATTATACCGCACCTCGGGGGGGGCCCGGCCCCATTTG TTCCTTAAGGGGTAATGCCCCCGGGAAAAAGGGAT

>Sequence 3995

>Sequence 3996

CAGGCCCAAAAACTGTCCTTGGGGGGGACCTTGGGACCTTAAAGAAAAA AAAAAAGCCCCCGGGGGGGGCTTGGGGCCCTTTTTTTTTCAAAACAA AGGGGCCCAAAAATTTTATTTTAAACATCCCCTTCTCCAAACAAGAGGG GGGCCCCCCCGAAATTCCCCCGCCCTTTAAAAAAACGGGGCCCCCC GGGGGGGGGGAGAACCAAAAATTTTTTCCTTCCCCGGAGCTAGGGGG GGGGCCCCCCCCCCTGTTTTTCTCCTTTAGGGGGAAAAAAAGCCCCC CCGCCCAAAATACCACAAAAAATTTTTTCCGGGGAAAAAAAGTTTACCTC CAAGGGGTCCCAAAAAGAAGAGCCACGCCGAAAAAAAAGGGTGCGCCGCC AACGGCCCAAAAAGGGGGAAAAGCGGGCTCCCCATTTGGTATAAAAAACC CCACCCCCGGAAAAGGGGGGTTCTTTTATTGTCCCCTCTCACACATTC TAAAAAAAAAAAAGGGTAAAAACGTGTTCCCGGAACGGGGTTAACCCCT AAAAAAGGCTTGTCCCCTTTCCCCCAAAGGGGGCGTACCCCCAAAAAAAT CTTTTTTAGAAGGCTCCAAAGACCGCCCCCCAGAAAAG >Sequence 3997

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## Table 3

>Sequence 3998

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AGGACTTTTTTTTTTTTTTTTTTTTTTGCTAAATTTTTAGTATCAGGAT GATACAGGTTTTATAGAATGAGTTAAGGAGGAGTCCCTCTTTCTCATTTC AGGGCTTATTTGACTGGTAGGTTTTTAATACTGCTTCAATTTCATTACTT GCTTCTGTTCTATTCAATATTTCTGTTCCTTCCTTGTTCAACTTTGTTCA GTCTTCCTTGTTCAATTCCTTGTGTTTCCATTAATTTATTCATTTCCTCT AGTTTGTGTAAATAGATATGCTTATAGTAGCTTCTGAGGATCTTTTGTAT TTCTGTGGGATCTATTGTGATGTCACCTTTATTAATTTCTAATTGTGCTT GGTTGGATCTTCTTTTTTTTTTTTTTTTAATCTAGCTAGGGGTCTATCA TATGTTGGTTTTTTAAAGAACAAACAATTTTTTTAAAAGATCAATTTGGA TGAAACAATCTTGGAGAGAAGAAACTTTTTAAAAAACTTGTATCAATAT TCTTAAAAGGGTAAAAAATGATTATCTTTTCAAGAAGCAATATGAGAATG CTATTAATAAAAACCCATTCACCGAGTAACCCCAAAATTATTCTTGAAAT TAAAAATAAGATGCTTAAATGAAAACTCATCCAAAATTTGGAAATGAAAC CAAGGAATCCTCAAAACCTAGCCAAAAGATTAGAGGTTTTTTAATGGAAA CTTGAAAAAACCTTGGTTGAAGGCCCATTCT

>Sequence 4000

>Sequence 4001

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## Table 3

TTGAATGAAACGACTTCTCTTGTGAACTATCAAGGGGCCGCCAGAATCAC CTCTGCAAGTATTGGGGTCAGCATAGGGACTCACTCCTCCAGTACCTGCC

>Sequence 4002

>Sequence 4003

TTATTGGTTGGGAAAGGGAGAAGCTGTGGTCAGCCCAAGAGGGAATACAG AGTCCCTAAAAAGGGGAGGGCAGGTGGGCTGAACCAGATGCAGGGCCAGG CAGAAACTTTCTTTCCTCACTGCTCAGCCTGGTGGTGGCTGGAGCTCAAA AATTGGGAGTGACACAGGACACCTTCCCACAGCCATTGCGGCAGCATTTC ATTTGGCCAGGACACTGGCTGTCCCCCGCGTACCTTGACAAAAAATTCT **AAGTTGTACTTTCATACGTAATTTTCTACATTAAAACTTATCAGTCGTGA** ATTTTAACTCGCGCTTTATTTTTTAATTTCTAAAATTGTTTTAGTCAAT TTTATAATCTTATTTCTGGTATGCGGATAATTGTAATTATTTTTATCAC TATTGTATATTCAATCGTTAGTATTTTCATAATTACTTTCTAGCGAATGT TTACCTTTCTATCTTCTAATCTCGTATAAATTCTCATTATTAAATAGC TATATTGTCAAAAĊCGAAATTCATATTTGGAGGAATCGCGTATTCCTTCT TATGGAATTTCTGTAAATAGACGTTTCGTGATACCCGAATTTGATTATTT CTATATACTGCAGAACTTTAATTCGTCTATAAGTGCAGAACTCTACAATT AATATATCTGGAAATATCTATATTTGCGCAATATTCTAATTACGTATGAA TTCGGGTACCCTGCTAATCGGGGAATTCCGCAAATTTACTTTTCCTGAAT TCACAATTTCCTTAAATCGACTTAATCAAAAATATTCTATAATTCACATA TCTTCGAAATCTCACTATTCTGTAAATCGCCCAT

>Sequence 4004

AGGTACTTTTTTTTTTTTTTTTTTTTTTTGTTTGAGACAGAGTTTCACT CATTGCCCAGGCTGGAGTGCAATGGCGCAACTGTGGCTCACTGCAACCTC CACCTACTGGGTTCAAGCAATTCTCCTGCCTAGCCTCTGGAGGAGCTGGC ATTACAGGTGCCGCCACCATGCCCAGCTAATTTTTTGTATTTTTAGTAAAG ACAGGGTTCCACTATGTCGGTCAGGCTGATCTTGAACTTCTGACCCCAAG GGAACCAACCGGCTTGGGCTTCCAAAGAGCTTGGAATACCGGTGGGAGCC AACATGCCCAGACAGCAAACAAGTTTAATTTCACTGTGAACTTGGGGCTC TTGGCCAGCCTGGAAGGCAAGGCTTGATCTTGACTCATTGCAACCTGTG TTTCCGGGGCTAAAGCAATTTTCCTTCTTCAGCCTCCCGAATAGCTGGGA TTACAGGGGTGGCCCACTTGCGCCGGGATAATTTAAGTTTTTTAGAGGAA AGAGGGGTTTAACTATCCTGGCCAGGCTGGGCTTGAACTTCCTGACCTTA GGGAAACCACCCGCCCTGGCCCTCCAAAAGGGCTGGGATTATTGGGGTAA ACCCACCGGGCCGGCCGGTTTAAAAACAAGGGAACCCCCGGGCTTGAGG AATTAAATTAAACTTTATTAATCCCCGCACCTTAGGGGGGGCCCGGACCC AGTTTTGTTCCTTTAAAGGGGTAAAAGCCCCTTGGGGAAATAGGGCAAAG TGT

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#### Table 3

>Sequence 4005

>Sequence 4006

>Sequence 4007

AGGTACTGGGAGTGATCACTAACACCATAGTAATGTCTAATATTCACAGG CAGATCTGCTTGGGGAAGCTAGTTATGTGAAAGGCAAATAGAGTCATACA GTAGCTCAAAAGGCAACCATAATTCTCTTGGTGCAGGTCTTGGGAGCGTG ATCTAGATTACACTGCACCATTCCCAAGTTAATCCCCTGAAAACTTACTC TCAACTGGAGCAAATGAACTTTGGTCCCAAATATCCATCTTTTCAGTAGC GTTAATTATGCTCTGTTTCCAACTGCATTTCCTTTCCAATTGAATTAAAG TGTGGCCTCGTTTTTAGTCATTTAAAATTGTTTTCTAAGTAATTGCTGCC TCTATTATGGCACTTCAATTTTGCACTGTCTTTTGAGATTCAAGAAAAAT TTCTATTCTTTTTTTGCATCCAATTGTGCCTGAACTTTTAAAATATGTA AATGCTGCCATGTTCCAAACCCATCGTCAGTGTGTGTGTTTAGAGCTGTG CACCCTAGAAACAACATATTGTCCCATGAGCAGGTGCCTGAGACACAGAC CCCTTTGCATTCACAGAGAGGTCATTGGTTATAGAGACTTGAATTAATAA GTGACATTATGCCAGTTTCTGTTCTCTTACAGTGAATAACAATGCCTTTT GTGCACTACATACTCTTCAGTGTAGAGCCTTTGTTTATGGGAAAAAGCTC AAATGCCAAAATGTGTTGATGGATTAATATGCCTTTTTGCCGAGCATACTA TACTGATGGGACTGGTTTGTCGAGCTTGGTTTGTTAAAGAAACACACTGN

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#### Table 3

CCCCGCGTACCT

>Sequence 4009

CCGGGCAGGTACGCGGGTGTTATTGAAAATTCAGCAAAACATAGGTGTGA TTGCAGCATTTACAGTTGCAGTCCTTGCTGCGGGTATCTCCTTTCATTAC TTCAGTGATTAGGGTGAGGCACAAAGAGTTTCTTGATCATCCAGAGAACA TTGACAGACAATTATGAATAATAAAGATGTTAACAATCCATCTGTATTTA AAACACTAGCAGCCAGATCTGCTGCCATGATGCCTATTTGGTGTTTTCT GATTAAAATGAAATCACAAGCTGCCTTGTTTAGCCTGCTTTACATTGTAG GTGGCCCGCATTTCCAGAAATAAACGTTATGCATCTAGATGGAAGCTGCA TGTAACAAATCATTAATATCTATTTTTAAAAGCTTCAAAATGATGGGATA TGATCATAGATTTTAGTCTTACTAATCTGAATCACATATTAATCAGGACA TTATAAAACTTTAACAGAGGCATGATGGCTCACACGTATAATCCCTAATG CTTTGAGAGGCTTGAGTAGGAACATCACCCGNGGCTGGGAAGGGAGTTGG AAATTAGCTGGACATGGTGGCAATCAGCTTTAGTCCCAACTACTTGGAGG GCTGGAACCGGAAGATCACGTGAACCCCAGAATTTTGAGGCTCGCACGAG CCATAAACCCATACTTGGCCTTGGGCCGGTTTAAAACCAGTGGATCCCTC CGCTTGCAGAATTCAATATCAACTTATTCATACCCGCCAACCTGAGAGGG GGCCCGGACCCAACTTTTG

>Sequence 4010

CCGGGCAGGTACGCGGGAGTCCAAAGGCATCCCGCCTTCTGTGCAGACTC
ACAAGTCCCTGTGGACGGAATTCTTGAAGTGTAGCGCCGCTCAGTCCTTC
CACCGGAAGTGTCCGATCGGAATCAGCCCTGTCCGAGAGATGGCTACAGA
ACCAAAGAAAGCTGCAGCCCAGAACTCTCCAGAGGATGAAGGACTTCTGA
TAGTGAAGATAGAAGAGAATTTATCCATGGGCAGGACACTTGCTTA
CAGAGAAGTGAACTCCTTAAGCAGGAGCTCTGCAGGCAGCTTTTTTAGGCA
GTTCTGCTACCAGGATTCTCCTGGACCTCGCGAGGCACTGAGCCGCCTCC
GGGAGCTCTGCTGTCAGTGGCTGAAGCCAGAGATCCATACCAAGGAACAG
ATTCTGGAACTGCTGGTGCTAGAGCAAGTCCTGACCATCCTGCCCGGAGA
TTTTGCAGGCCTGGGTACCT

>Sequence 4011

>Sequence 4013

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#### Table 3

GAGTGGTAGGATGAAACAATTTGGAGAAGA

>Sequence 4014

AGGTACTTTTTTTTTTTTTTTTTTCTCTAAAGAAAAAACTTAATGACC TTTCAAAATGAATAGGCCCGATTTATGATAAATGATTAGTTAACAATTGA AGTTTTTTAGTTTCTTTCTTTGGGAAACAAAAAAAAATACTCACTTTTAT TATTAAGCCCATAATATTTGGTAGTAATACAAATATTTCCTAGTGGCTCC CATTCTCTAGCAGCAAGTCAAACAGCCTCAAGAGAAAAGTATTAAAATTG TGCTATTATGACATAGCAGATAATCTGGAATAAAACAAATCCCTCTAGGA TCATTATATCCTAAAAGTTCTTTGCCCCAGTCTTAGAACATGGCACTTTT GAGCATGCTAAAATCATGATAAGGACATATTTCTCTCTCATTTCACACC AATAAAGGAGGAAAAAAGCCTTGTCCTATAGGCACCATCAAAATAATCTA CCCACCCCAACTATGCCAGGCTCCTGTCTCTTTGGGAGTTCGGGGGCTTC TCACTAGCAGGAAAGTATAAGCAGAGAGACCATTAGTTATGACATGGAGA CTCTAACTGATCATGCTGACTCACTTCAGGAGCTATTATACTATTAAACA GTGTGCTGAAAGCCAATTATCTGCATTGTAAGAATAAACAGCAAAAAACC CTTAATTAAAAGGATTGCAAGAATTAACCTGCGGATGTCAAACCCAGTGA AGCTACTTTTGCAAAGAAAAACCTGTGAAGGAATAAATCAATTGGGCCAT TCCGGAGGGTAAACCGAAAATTCACTT

>Sequence 4015

>Sequence 4016

CCGGGCAGGTACGCGGGTATTTTGAGGAATTACGAAAGGTGCTAGTTAAG GTGGATGAATATCATTCAGTGCATCAGAAGCTCAGTGCTGATATGGCTGA TCATTCTAATTTGATCCGAAGTTTGCTGGTCGGAGCTGAGGATGCTCGTC TGATGAGGGACATGAAAACAATGAAGAGTCGTTTTATGGAACTCTATGAC CTTAATAGAGACTTGCTAAATGGATATAAAATTCGCTGTAACAATCACAC AGAGCTGTTGGGAAACCTCAAATCAGTTAAATCAAGCAATTCAAAAGAGC AGGGTCGTTCGCCGGGTTGGGAAAACCCAAAGAACCCAGGTGGATTCAC TGCTTTGTTCGGGATGGCAATTTCGAAGCAATTACCATTAACCACCACTG

>Sequence 4017

AGGTACAAGAGGACCATCCTACCAGTGGGGCCACGTCTCAACGGTTTATC
CTTCACTCATTTTTCTGCACGTCATCCTGAGGTAAACCAATTTAAATGT
GTTTGTTTTCAGTAAACCAGCTATGACAATTTATACTAAACAAATTGAAC
TAGAACCCATTTGAATAGGTTTTGAATTTGTTTTTTCATTTTTT
AATACAAAAGGCCTGAACTGTGCTCAATTCGTCAAAGCTGCAATGCATTG
AAAAAACTGTGCCAGCCCCACCCCGCGGTACCTTGCCCCGGGGCGGTCG
TTTCTAAGAAACTAAGTGGGATTCCCTCCGGGGCTTGCCAGGGAAATTTC
GATTATTCAAAGCCTTTATTCGGATTACCGGTCCGAACCCTTCGAAGGGG
GGGGGCCCCCGGGTTACCCCCAAGACTTTTTGGTTTCCCCTTTTTTAATTG
GAAGGGGTTG

>Sequence 4018

AGAACACGAATTTTATCGCCCACTGGGCAGGCAGCCC

>Sequence 4019

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## Table 3

GTTTAGCAAAACAAAACAAATGGCACAAATTTCAATATTGATTTAACTG GAGTGTTCTTAATGGGTAAGGGAGGGGAATTAAAAAGCCAGCTTGGGTG GGGTAATTCTTTAAAATTTTTAGGGCATTTAAAACAAAAAATTTTTTAAA GACCAAAAACCTTTTAATTTTAAGGCTTACTTTAACCTGGGAAATTAAAG GGGCTTAAAACCTGGGGGGGAATCATTTTTTCTGGGCCATTTTTTAAAAG GGTGGGGT

>Sequence 4020

AGGTACACTTTCACTGAGTCCAAAATTAGGAGCAAAAATACAAAGGTTCA
CATTGGTCTTAGGTAGATACAGGCGAAAAAGGATTGAGCTGTTTAGCTCA
GAAACAACAAAAACAAAGTTTCTAAAGCACCACTAAATTATATAAAAATC
AGACCATGGACGGATTGAAACTGGTATTCTGGTGAAATACTTTACTATTT
TGTAAAAAGTTTTACAAAAAATTACAAATTAAAAGTATCAACCCTCTGAG
TTCAAAGCAGCATTTTGAAAATGAACTGGTAGTTAATCCTGTAACCACCC
TTAGAGTTGTAAGTGGACCTTGAGAATAGGGATGGGTTCCCCCTGT
CTGACATNCTCGAAAAACCCTTCTAAACTCCTTGCTGTCCCCTTCCCCGTA
ACACTGTNCTTTGGGAATAAACTGTNCTTTTGTAAGAGTGGTGACCGGTA
AAATGAAATTCAGAACCCGCGTACCTGCCCG

>Sequence 4021

CCGGCCAGGTACTTCCTGTAATTGACAGCCTTGCCTTGTTCCTCATGGCA TCATACGTTATGGTTTTCAAATGCATCCAGAGGAAAGGCAGGGTTGTTTT TGAAAAGTTTACTTCTATCTGAAAGCTTCTAGCAAATGAAAGCAAACAGT GCAAAGCTGAACTACAAATAATAAAGCACAATTATGGCAGGAATCTGTCC ACATTCACCCAAGCTACTGTGCCATTAAAGAGGGAAATAGACAGTTGAGC ANGGATGATTCATTTGCCCACCTTTCTTTATTAAAAAGAGCTTTAAGGAC CGCAACAAGAAAGCTTAAACGTGCACTTAAAAAGTTTGTATTAAGAGCCT CGTGTCCTACCCCCTAAAATTTTAACACCTTCCGATGCCATATTACGTGG TAACCTTTCTTATAAGTTGCAAAAATTCTGTGAAATTCTTGCAAGGAAAG ATGGGTTTAATATTCTGGGGCATTCTTTTGCCAACTTTCATTTCGTTTCG GCCTTCGCCCTTGACCTTGTAACCAAACTCATTCAAAGCCACCAAGCATT GCCAAACCAAAGGCCCCCGACAAGGATGTANAAATCTTCCAACACCGTTG GCTCAAACTGAAGGCACTTGTCTTTTCCCTAAAGATGTTTTTGAAAGAAG TTATTAGGAAAGCAACTTGGTGATTAAAGAAGACAGGCATGTCCCATACC TTTATCCCGGACCAACTATCCCACCGAATGCTTTGTATTTGA >Sequence 4022

AGGTACCTACGAGGGTGAGAACACAGTGCTCTACCTGCAGGTGGCCAGGT TCCTGGTGAAGAGCTACCTGCAGACTCAGATGTCCCCTGGCTCCACGCCA CAGAGATCTCTCTCCATCTGCGCATATCTCACCGCACCTGACCTGGCC AGGTGTCCAGCCCAGAGGGCAGCCGACTTCCTCTGCCCGGAGCTCTACAC CACGGCCTGGGCACATGTGGCAGTAAGGCTCATAAAGGACTCAGTGCAGC ATTTACAGACCCTGACGCAATCCGGAGCTGACCAGCACGAGGCTTGGAAC CAGGCCACTGTCATACACCTCCAGGCTGCTAAGGTGCACTGCTACTATGT CACTGTGAAGGGTTTTACAGAAGCTCTGGAGAAACTAGAAAATGAACCAG CGATTCAGCAGGTGCTCAAGCGCCTCTGTGACCTCCATGCCATACATGGA ATCTTGACTAACTCGGGTGACTTTCTCCATGACGCCTTCCTGTCTGGTGC CCAAGTGGACATGGCAAGAACAGCCTACCTGGACCTGCTCCGCCTGATCC GGNAAGATGCCATCCTGTTAACTGATGCTTTTGACTTCACCGATCAGTGT TTAAATTCAGCACTTGGGCTGTATGATGGAAACGTCTACGAACGCCTGTT CCAGTGGGCTCAGAAGTCACCAACCAATACTCAGGAGAACCCTGCCTATG AGGAATTATAAGACCACTTTACAAAGTTGGAGATCAAGCTATGAAATACC AACAGTATTCAAGAAACAACCGCAACATTCTGTGAAATGGTACTTGCCGG GCGGCCGNTCTAGAATN

>Sequence 4023

AGGTACGCGGNGATCCAGAATACATTTCCAACAAGAGCACTGGCCAAGTC AGCTTCTTCTGAGAGAGTCTCTAGAAGACATGATGCTACACTCAGCTTTG

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## Table 3

GGTCTCTGCCTCTTACTCGTCACAGTTTCTTCAACCTTGCCATTGCAATA AAAAAGGAAAAGAGGCCTCCTCAGACACTCTCAAGAGGATGGGGAGATGA CATCACTTGGGTACCTGCCCG

>Sequence 4024

TTCTTTTTTTTTTTTTCTTCGGCGGGAAAAGGACCCCTTTTTTCG GAAAACCCCCCCCAAAAAATAAAATCTAAACAAAAAACCTCCCCGGGG GACAAAGGACCAAAAAATTGTAAAAAAAAACTGCCGCTTAAAAAAACACCC GAACCCCCCCGCCGGGGGAAACCCAAACCAAACCTTTTAAACCCCCCCA CCCCGAGGGGGGCCCCCACCCCCATTTTTTGCCCCTTTATGGGGGGGTA AATTCCCCCCTGGGAAAAATAAAGGCCAAATGCTTTCCCGGGAAAAAAAT ATTTACGCTTAAAAATCCCACACAAAATAAGCGCGCTGACAAAAAATAAA ACACCGGCGCGCCCCCACGGTGGCCCCCCCAAATAAATGGGTCCCCC CCCTCCCCCCCTTTCCACAAGAAAACACTTAGGCCCCCTTTATTATTAG AAACACACCCCCCCCCCGGGGAAAGCATTTTTCTATTTAGCCCTCTTTC CCCTTTTTAGCTGAAAAAATCATAGACACGCGGGATTGTGGGGAGCGCG AGGATTTTTTCTCCCCACAAGGGGGAATTGTGTCTCTCACCCATTTGGGT GACCCCGCGAAAAAATGTTGGCTACAGGCCCCCAAAAGGCCCCAACCCC AAAAAACCCGGTTTC

>Sequence 4025

AGGTACTTTTTTTTTTTTTTTTTTTTTTTGGGCAGCTAAAATCTAGGAT GGTGTTAAGTTTCTTCATTTTGTCAATTATATATAAAAAATTAGAAACAA CATGAATCTGCATTTCTTGGATGAGATAGTAATAACAAACTATTTCTCAA TATTTGTATACTAAAAACTAGTGAAGGTGTTATGTGTTTCAGTATCTTAT CTCTTATTTGAACATGGGTTTCTGAAAGGAGCCTATATAATAATAAAAT GGTATGTAGTAAATGAGGCACTGTCTTGGCTGGGACTGCTATAAAAAAAT TACCATAGACCATTGACTAAACCACAAACATATACTTCTCACAGTTCTGG AAGTTGGAAAGCCAAGATGAGGATGCCAGTATGGCTAGCTTCTAGTGAGG GTCCTCTTGCAGGTTGCAGACAGCCGGCTTCTTGGCTCCTCACATGGCAG CCTTCTGAAGGCTCCACCCCAAACACCATCACATTGCTGACTTCCATTA AATGGGCGCTCTTNCGCTTCCTCGCTTACTGACTTGCTGGGCTTGGGCCG TCGGCTGCGGCAAGCGTATTAGCTCACTTAAAGGGCGGAATACGGTATTC CACGAAATAAGGGATAACCCCGGAAAAAACTTGTAACAAAAGGCCACCAA AGGGCAGAACCGAAAAAGGCCGGTTGTGGGGTTTTCCATGGG

>Sequence 4026

AGGTACGCGGGCAAGTGAACATGCCTGCAGATTCATTTGAATCTCCATTG ACGCTAGCTGCCTGTGGAGGACATGTTGAATTGGCAGCTCTACTTATTGA AAGGGGAGCAAATCTTGAAGAAGTTAATGATGAAGGATACACTCCCTTGA TGGAAGCTGCCCGGGAAGGACATGAAGAAATGGTGGCACTACTCTTAGCA CAAGGAGCAAATATAAATGCCCAGACAGAAGAAACTCAAGAAACTGCTCT TACTTTGGCTTGCTGGAGGATTTTCTGAAGTTGCAGACTTTCTTATTA AGGCAGGGGCTGATATAGAACTTGGCTGCTCCACACCTCTGATGGAGGCA TCTCAGGAGGGACACCTGGAATTGGTTAAATATTTGCTGGCTTCTGGCGC TAATGTGCATGCTACAACAGCAACAGGAGACACAGCCTTAACCTATGCTT GTGAAAATGGACATACGGATGTTGCAGATGTTTTACTTCAAGCAGGGGCT GATTTAGAACATGAATCTGAAGGTGGAAGAACACCTTTGATGAAAGCTGC AAGAGCTGGTCATTTGTGCACTGTGCAGTTTCTTATTAGCAAAGGTGCCA ATGTTAACAGGGCTACAGCCCATAATGATCATACAGTAGTGTCCCTTGCA TGTGCAAGAGGCCACCTGGCAGTTGTTGAGCTTCTCTTGGTTATGGGGCT GACCCTACTTATCGACTCAGGGATGTTTCAACAATGCTTAATGAAGCTTG AAAGGGGGCCCTAACTAAGGAGTTCTTAATTTGTGGATATCCCAAAATG >Sequence 4027

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## Table 3

AGGTACATTGTAGGATGCTTACCAGATCCTGCCCACTAGAGGCCAATAGC ACCTCATCATCATAGCACCCCTTCCCTCAGTGATAATAAAAAATGTCTCC AGACATTGTTTAAGTTAATAAATGTGCCCAGAGCCCAGGCACAGTGGCTC GGCCAGGAGTTCCTAGAACGTTCCTCTGTCAAAAGACAAAATTACAACAA TTTAAAATCTAATTGGCTGTTATTGGCCATTCTAGAATTGGTTGACATCT CATTCTATGAAATACAATGAGTGCTCTTCAATAAGCTGAGCAGAGGGGGG GTGATTGGTTGTTTCAAAGTTACTTTCCTTAAAGAGGTAAAGCACAGAGG ACCCCCTATCATCCTGGCTCAGGTAACGGTGGTGGCACTCCACATCAGC CCTCATTTTACACGGGAAGGTAGTTGCTATTTTAACAGGATTCATGGCCC ATAAAATATTAATGATGCCTTTAGGGGTCAATGCATTAATTTAATAGGGA TTATTATAAAAATGGAATTTAATTTCTTTTTTTGGAGGGTGTCTGGGGCA TTGTAAATAAGGAAACTCAATGGTTGGCCCTGCCCGGGCCGGCGTTTTGA ACTGTGGATCCCCCGGCTGGAGGAATTAATTTAACTTATGTTCCGGCCCC CTCGAGGGGCCCGGAACCAACTTTGTTCCCT

>Sequence 4028

CCGGGCAGGTACCAACTAACCTCCCGCTCTTTATCTCCCCAACCTTCCCA CTCCCCAGCCTCTAGTAACCATTATTCTCCTCTACCTGTGAGTTGATTTT GACCTCCCACATAAGAGAATGTGGCAGTATTNTGTTTTTCTGGTGCCTGG GNTTATTTCATTTAACCATACTGTCCTCTGGTTCCTATCCTTGTTGTTGC AAACGACAGGATTTTGTTCTTTTTTATGACTGAATAATATTCCATAGCCA TATACATACCATGTTTTCTGTATCCATTCATTCGTTGATTGGCAGTAAGG TTGATTCCATATCTTGGCTGTTGTGAATATTACTGCAGTAAACATAGGAA TACAGATATCTTTTCCATATACTGATTTCCTTTGTTTTTGGATATATACCC AGCAGTGGGCTTGCTGGATCATATGGCAGCTCTGATTTTAGGTTTTTAAG GATGGGTTTTTTTTGCAATGAGAATAAAAATTTTCCATGTATAAGATCA GTGTCTTTGAACTTTGTTTATATCCTTTGCCCATTTTTCTATTGAGTTCT TTTTTCTTTTTGAGACAGGGTTTATTGCCCAGGCTAGAATGCAAGGGCAT GAACACAGCTCACTGCGGCTTTGATCTCCCGGGCTCAAGTGGTCCTNCCA TGTCAGCCTTCTCATAACTGGGACTAGAGGCACATGACATCATGCCTGGG CTAATTCTTGATATTTTGGGGAGATGGAGTTTTCCTTTTTGCCCAGGCGG TCTCCAGGGCCTGGCCTAAAATGGCTCTTTGCTTGACTTCCCAAGGG >Sequence 4029

CCGGGCAGGTACGCGGGTCTATATAAATCCAAGACAAGCAACAAACCCTT GATGATTATTCATCACTTGGATGAGTGCCCACACAGTCAAGCTTTAAAGA AAGTGTTTGCTGAAAATAAAGAAATCCAGAAATTGGCAGAGCAGTTTGTC CTCCTCAATCTGGTTTATGAAACAACTGACAAACACCTTTCTCCTGATGG CCAGTATGTCCCCAGGATTATGTTTGTTGACCCATCTCTGACAGTTAGAG CCGATATCACTGGAAGATATTCAAATCGTCTCTATGCTTACGAACCTGCA GATACAGCTCTGGTGCTTGACAACATGAAGAAAGCTCTTAAGTTGCTGAA TTGAGACTTGGAAACCAGAAGAAGTGTGAAGAAGACTGGCTAGGGGGGGA AACATTGTGAACACACTGATTAGGTTATGGTTTAATGGTTCAACAACTAT TTTTTAAGAAAAACAAGTTTAGAAAATTGGTTTTAAGGGGACCTTGGGTG AAAACAAAATTGTGTACTACCCTAGTGGGGCCTGAATTTTCTAAAACAAA AAAATAATGGTTTGGGGGGGTTCTGATTTTTCCAAAAAGTCAATACCGCA AAGCTCATTTAGGGGATCAAGGCATATAAAAAGTGTCCCTGGGCCCTTTA AAAAAATGAGACCCCCGGGTTTTGGAAACCCATTAACCGGGGGGCCCCC GACCCAAGGTGGCCCCTACACCGCCTTTTCTCCTCTGGAGCACCCCC

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## Table 3

AGGTACTTAACTAGGGTTAGCCGAGGTCAGGAGGGTGGATGCCTTATTAT
GGGATTAGTGCCCTTCTAAGAGGGACAGTAGAGGGCTTGTTCATGCTCTC
TCTCTCCATGCACAAGAAAGAGCACACAGTGAGAAGGGAAAGAGGCTCCT
CACCTAGAACTCTGACTCATGCTGGCACTCGTGATTGGCAGACTTCCAGC
TCTCCAAGAATTGTGGAAAATAATACTGTGGTTTAAAGTCACCAAGT
CTGTGGTGTTTTATGGCAGCACAAAGATAAACCCAGAATGATGCTTTTCA
CCACTGGGTGGGCCAGCCTTTCATGGAAGCTGCAGCTCCTCAGCCCTGC
AAAAAATGCTTGCTGGTCACTCCTTTTGGTCCTTTCAGATGCCTTTCTTA
GGGGTGCCTCTACCAGGCCCTTGACTTCATCCTTTTCTGTCCGAGGGAAG
GTGAGTAAAGTACCTGCCCG

>Sequence 4032

AGGTACTGCCAGAAAAACACTGAGAGAAAAACACTGAAATTGAAAAACAC TTTCAATTTATTTGAAAGATAACTTTCAAAGAAATTTTCATAACTCAAAT GTGTTTCTTTTTCCAGAGAAGTATATCAGAGAATTCCCTGGTAGCAATG GACTTCTCAGGCCAGAAAAGCAGAGTTATAGAAAATCCCACTGAAGCCCT TTCAGTTGCGGTTGAAGAAGGACTCGCTTGGAGGAAAAAAGGATGTTTAC GCCTGGGCACTCACGGTAGCCCCACTGCCTCTTCACAGAGCTCTGCCACA AACATGGCTATCCACCGGTCCCAGCCATGGTTTCACCACAAAATTTCTAG TCTTGGTACCTGCCCGGGCGGCCGCTCGACCTGCCATAACCAATACCAA ATCTCTCCCAGTCCTAGCTGCTGGCCTTACTATACTACTAAACAGACCGG AACCTTAACACCACCTTTTTCGACCCCGCCGGAGGAAGAGACCCCATTCT ATACCCAACACCTATTCTGATTTTTCCGGCACCCTGAAAGTTATATTCTT ATCCTACCACGCTTTGGAAATAATCTCCATATTGTAACTTACTACTTCCG GAAAAAAGACCCTTTGGATACATAAGTATTGTCTGAGCTTTGATATCCA TGGGCTTCCTGGGTTATCGTGGAGCCCCCCTTTTTTTCCGTCGGAATTGA CTTAACCACAAGCATTTTTACT

>Sequence 4033

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## Table 3

TTTTTGACAGGGAAAACAGCTATCAGGTTTCTGGAACATTCTTGAATAGC
TAATTCCTGGAGTCCTTGTCCTCACTTCTCCTCTGTACCTCACTGGC
ATTTGCTCCAAGATCTCCTTTTCAAACAACGTCCTGGCACTGAGCTGAGA
TTTCCAAATGTTAACTCCCTGGCATCCATCCTGTAGGTGCAGAAAGGATT
CTTCCCTGATTTGCACACAAACCTTTTCATTTCGATGCATATCAGGGTCA
TCTCGGCTTTGTGCCTACAAGGTGGTTTGGAGGCCATG
>Sequence 4035

>Sequence 4037

>Sequence 4036

>Sequence 4038

CCGGGCAGGTACGCGGGGGGTGGAGGGAACGTCTGACAAAATTCAATGTT
TGGAGAAAGCGACATCTGGAAAGTTCGAACAGTCAGCAGAAGAAACACCT
AGGGAAATTACGAGTCCTGCAAAAGAAACATCTGAGAAATTTACGTGGCC
AGCAAAAGGAAGACCTAGGAAGATCGCATGGGAGAAAAAAGAAGACACAC
CTAGGGAAATTATGAGTCCCGCANAAGAAACATCTGAGAAAATTTACGTGG
GCAGCANAAGGAAGACCTAGGAAGATCGCATGGGAGAAAAAAAGAAACACC
TGTAAAGACTGGATGCGTGGCAAGAGTAACATCTAATAAAACTAAAGTTT
TGGAAAAAG

>Sequence 4039

CCGGGCAGGTACCTGTTGGCTTTCTGCAGAGATGCTTACTTTTCCTCTCC
TATCAGAGTTTAATGTCCTGGGACTCTGACATTTTGGTAAGTGTTTTCTT
AACCCGCAGGGCTGTCAGCCTTGATGCAGGATTGTGAGCCCAGCATTCTG
TCATGAGTTTTCCCATCTGCCTTAGACACTCATCACTGCTCCACCGGTTT
GGGAATGAGGGGCGTAACTTCTTGATGCACACAATCTCCCTCATGTCCTC
ATAAGAGGGGTCACTGGGCACTAGGTCATGATAAGGAAGCTGGTATTCTT
CCACTATACCTCCTGATACACATCTCCTAGCAACCTCCCAAAGGATGAGG
CC

>Sequence 4040

CCGGCAGGTACGCGGGTGGTGGCTGTGCTGGTGGCGTTCAAGATGTCG ACCAAGAATTTCCGAGTCAGTGACGGGGACTGGATTTGCCCTGACAAAAA ATGTGGAAATGTAAACTTTGCTAGAAGAACCAGCTGTAATCGATGTGGTC GGGAGAAAACAACTGAGGCCAAGATGATGAAAGCTGGGGGCACTGAAATA GGAAAGACACTTGCAGAAAAAGAGCCGAGGCCTATTTAGTGCTAATGACTG

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## Table 3

GCAATGTAAAACTTGCAGCAATGTGAATTGGGCCAGAAGATCAGAGTGTA ATATGTGTAATACTCCAAAGTATGCTAAATTAGAAGAAGAACAGGATAT GGTGGTG

>Sequence 4041

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TTATTATGGGATTAGTGCCCTTCTAAGAGGGACAGTAAAGGGCTTGTTCA
TGCTCTCTCTCCATGCACAAGAAAGAGCACACAGTGAGAAAGGAAAGAG
GCCCTCACCAAAACCTGACCATGCTGGCACCGTGATTGCAGACTTCCAGC
CTCCAGGATTGTGAGAAGATAAATATCTGGTGGTTTAAAGTCACCAAGTC
TGTGGTGTGTTTAATGGCAACACAAGGTAACCCAGATGATGCTTTTCACC
ACTGGGTGGTCCAGCCTTCATGGAAGCTGTCAACTCCTCAACCTTGCAAA
AATGCTTGCT

>Sequence 4042

>Sequence 4043

>Sequence 4044

>Sequence 4046

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#### Table 3

CCGGGCAGGTACTCAAGGCAAACCAGCAATTGCCCATCGAGATCTGAAAA
GTAAAAACATTCTGGTGAAGAAAAATGGAACTTGCTGATTTGCTGACCTG
GGCCTGGCTGTTAAATTTATTAGTGATACAAATGAAGTTGACATACCACC
TAACACTCGAGTTGGCACCAAACGCTATATGCCTCCAGAAGTGTTGGACG
AGAGCTTGAACAGAAATCACTTCCAGTCTTACATCATGGCTGACATGTAT
AGTTTTGGCCTCATCCTTTGGGAGGTTGCTAGGAGATGTGTATCAGGAGG
TATAGTGGAAGAATACCAGCTTCCTTATCATGACCTAGTGCCC
>Sequence 4048

AGGTACTTTTTTTTTTTTTTTTTTTTTTTTTTTGCGATTAAACTACTGTTGTAT
CATTGGCCTGCGACGGTTACAGGTCCACAAACTGTTTAACTGGACTTATG
TGAGGTGGTAAACCCCCCCATTTTACAGGTCTTTGGGAAGTTCTGGGGCC
AGGAAATCCAAATTTGATAATAGGATTTTCTCAACTGAACTCAGGGCAAA
CCACAAATGGTCTGAGTGAACGCCCTGCGTGACAGGTGCCTTCCTGCAGG
TAGGAACACTTCCTCTGCAGTCAGAGGGAGAAAACATCAGGAGCTGG
ATGTGATTTCAGATCTGCACCGAGAAACATGCTGATTTCACTGGGGATGT
GGCAGTCCC

>Sequence 4049

>Sequence 4050

AGGTACTTTTCTTTTTTTTTTTTTTTGAGACAGAGTCTCGCTCTGTTGCC
CAGGCTGGAGTGCAGTGGCACAATCTCAGCTCACTGCAACTTCCACCTCC
CGGGTTCAAGTGATTCTCCTGCCTCAGCCTCCTGAATAGCTGGGACTGCA
GGCACCCACTGCCACACCCCGCTAATTTTTGTATTTTTAATGGAGACAGG
GTTTCACCATGTTGGCCAGGCTGGTCTCGAACTTCTGACCTGAGGCAATC
CATCCACCTCGGCCTCCCAAAGTGCTAGGATTACAGAGGTAAGCCACCAT
GCCTGGCCCCAGTCTCTACTAATTTTCTGTTGATGCTGTAACAAATTACT
ACAAACGTTGTGGCTTAAAACAATATACATTTATTATCTTAACAGTTCTG
TAGGGTAGGAATCTGACACAGGTCTTGTTGGCTAAAAATCAAGGGACTGGC
AAAGCTTGCATTCTTTCTGGAGGCTCTAGGAGGGAATCCAGGTACCTGCCC

>Sequence 4051

ATGTACTTTTTTTTTTTTTTTTATAAAGCCTTTCCTACATCAGGTTT ATTTAAAACACAAACAAGTATTTCTCTTTCTGTAAGGGCAAATGGTTCAA ATAATGCGGTACACGAAACATTGACTAATCAAGTGCTTTAAATATGAAAC ATAATTATTGTTTAAAAAAGCAAAAGAATAAAGAATTTATACAAAAGGGA CCTGGAATTTGTAAGCTGATTCCAAAATCGAAATAAGTAGAAAATCCATG GTGAAACCTGAACATTCTACCTTTGCTTTGGAGAAGGGCTATCATACAAC ATGGAGTCATTTGATAATGGAGTTGGTGAGGTGATTTTATACATAAACTT CAGTCATTATTGCTGGCGCAAAATAATCCCAATCTTGCCATGACTGAATG GGCGGCCTGAGGCTAAATTCCTTTTCCATACCATACGTCGTGCCGGGTG AGGTCGTTTTAAGAGCTTGTTGATACACCGGGCTTGCAGGAGTTGGGATA TCAATCCTTATAGTTTACCTGTTATCCTATGAAGGGGGTGCTGGGTACCC TAGCTTATGTTTCCTTTAAAAGAGGGTTTAATGGGGTCTCTTGTTATTAA TCATAGGTGCTAGTTTATAATACTGAGTGAGAAGGGTGTATCGTAATACA TATGGCGGCAGATATTATATTCTGGGTAGCCTAAAGTTGAAATATCTGGG GGTGGCTGATGGTTTAGTATATGCTTAAATTAGTTGCGTTGTTCTATC ATGCAGGTTTGTCTTAGCTGGATAACAGATTTGGCCGAGGTGTGTTAATA TAATAAGCCAACGTGCGTAGGAAAG

>Sequence 4052

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### Table 3

AGGTACATTATTTCCAGAGCAGGCACTGGCAGCGAGATAGGGTTGGAGGA GAAGTAGCGCCGGGACTTCCGGATGGCAAACTTCTCTGTGGGTAGAGATT TCCCAGCAATCTTGAGCTGTCAGGCCTGGCACAGCTCGAAATAATTCCAC TTCGTCGACCCCGAACGCTTGTGGTCCTCCTTCCCAAACATGCTGAGGT AGGCGGCCTTCATGTAAATGTACGTGGCCTTTTTAAGTCAAATCATGTCA GTTCCTTCTGGAAATCTGGCTATATTCCATCACACTCAGGAGACATCTCC TACAATTTCCTTGACACCTGCAGCACTACAGTCACACGACGGCCCCACGC GTACCTGCCLGGGCGGTCGCTCGA

>Sequence 4053

GTTTTTTTGGGGGTTTTTTTTGGCAGCCACAGGAGTTTTAGCCAATTCAG ATGCCTTGCTCCCCACAATTTGGAACATTCCTTTGGATTTGACCAAGTCA GGAAGAGATGGGAGAGAGTGAAACAGCAACAATAAACCCCAAACATAAA CAAAAAGAGTTAAGCAAAACAAACAAATGCACAATTCATATGATTAACTG AGTGTTCTAATGGTAAGGAGGAATTAAAAGCAGCTGGTGGGTAATCTTAA ATTTTAGTCATTAAGGAAAAATTTTAAGACAAAACTCTAACCCGCGTACC

>Sequence 4054

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>Sequence 4055

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>Sequence 4057

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Page 682 of 685 of Table 3

# Table 3

>Sequence 4058

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>Sequence 4059

>Sequence 4060 CCGGGCAGGTACGCGGGGCCATTTAGCCTGCCATTGAAATGCAAAAGTCT GTTCCAAATAAAGCCTTGGAATTGAAGAATGAACAAACATTGAGAGCAGA TGAGATACTCCCATCAGAATCCAAACAAAAGGACTATGAAGAAAGTTCTT GGGATTCTGAGAGTCTCTGTGAGACTGTTTCACAGAAGGATGTGTTTTA CCCAAGGCTACACATCAAAAAGAAATAGATAAAATAAATGGAAAATTAGA AGGTAGATATGCTGCTGAATTTAGAACATTCTCTGCAATGATAAGGTCTC CTGTTAAAGATGGTCTTCTGAAGGCTAACTGCGGAATGAAAGTTTCTATT CCAACTAAAGCCTTAGAATTGATGGACATGCAAACTTTCAAAGCAGAGCC TCCCGAGAAGCCATCTGCCTTCGAGCCTGCCATTGAAATGCAAAAGTCT GTTTCAAATAAAGCCTTGGAATTGAAGAATGAACAAACATTGAGAGCAGA TGAGATACCTCCATCAGAATTCCAACCAAAAGGACTATGAAGAAAGTTTT TGTGATTTTTGAGAGTTCTTGGGAGACTTGTTTACAGAAGGATGTGGGGT TAACCCAGGGCGGCCTTAAAAAGAAAATGTTAAATAAAGGGAAAATTTG AGGGTTTCTGGTAAAAAAGGTCTTCTGAAGGTTACTGGCCGAAGAAGGTT TTTATCCAACTAAAGCCTAAAATTGGGGGCATGCCACTTTTAAGAGCTTT CTTCCAAAAGCCTTTTGCTT

>Sequence 4061

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## Table 3

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AATTTTGATGAGTGCGATGTCTGCTTTCTCATCCCCGCGTACCTGCCCG
>Sequence 4063

AGGTACAGGGTCCCAAAATGCGCTGACTCAGCTTCACCAGCCCATCTCGG ATCTCATTGCCAAAAATGTCTCTTCGGTCATGAATGAGGATCCAGCCCAA CCTCCAGTCAGGAACCAGCCAGCGCTTGGCCAGCCTCTTCCACAGGAACA GGATGGGGACATCGGTGCTGAGGGTGGCCAGTGGTTCATATTTGCAATCC GAAAACACCATGTCTCCATAGATCTCATCAGCTAAGATGGGGACACACTG CCGTGCAGGCACTGCCAGAATCTTCTGAAGATGAACGTTGCTGAACACTG ACCCACAGGGGTTTGATGGATTATTGACAATGAGACAAGCTGTCTTTTCA TCAATTAGATATTCCAGTTGTTTCAGGTCAATTTTCCCAAGATTTCTCTG GCAACAAATTGTAGAGTTTGACCTCAATTCCCATAGACTTAGCCAGAGTC TTGTAGAGAGAAACCACGGTCTTGGAACCAGGATGCTTTGCCCTGGGT TGGCCAACACAGCTAAACTAAGGTCCAATAGCTTGGCTGGAGCCACTTGG TAGAATGGACGTCCTTAGCTTTTGGGGCTGCCTTAAGGACTGGTGTTAAT ATGAAGCAATCTCCTTCCGTACTGTATAGGAAGCCCCTTGGTAAGGGCCA TACCCCTTATTATTGCCCGGATACAGTGGATTCTTTAATTGCCTGGGTAA ACTTAAGGGCTGGTGAGCGGTTTTCAAACACAGATGGGTCCCAAATGGAG AGGAAAAATATGATCTGTATGAATATGCTCACCATAATGTGGCAACATCG **CCTAATAAGGGCAAAACT** 

>Sequence 4064

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TAAAGGGGGTTAAACCGCTCATCCTCTAAATTCCGGGGTATTCCCTAGGA
AATACCTTTTATGCCAAGGTCCCCATAAAGGTTAGGAACCCGTAATAAGG
TCCCATTTTTGACTCTTTTATTAAGGTTCTCCCCCCTGGCCAGCGTGAAA
AATATGATTCT

>Sequence 4065

>Sequence 4066

AGGTACGCGGGACTGCACACATGCTAGGGTCCAGGACAGGACCAAG CCAGCAGAAACAGCCTGAGCCCACCGCAGACTGGCCTGGCTATACTGGAC AATGCCACTCCTCCTGTACCTGCCG

>Sequence 4067

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## Table 3

AGCAACTTGAGAGCTTTCTTCATGTTGTCAAGCAACAGAGCTGTATCTGC
AGGTTCGTAAGCATAGAGACGATTTGAATATCTTCCAGTGATATCGGCTC
TAACTGTCAGAGATGGGTCAACAAACATAATCCTGGGGACCCCGCGTACA
CCTGGGCACCAGTGACATTCCAGATGTCCTTGGGGGGCGTCACTATGGAA
GGACCTTGCTCGCAGGTGCCCTTGCTGACCTGGGTGCCCGCGTACCT
>Sequence 4068

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TTCTGGACAACTTGGACCCAGTCATGTTCTTCAAATGCCCTTCCCCAGAG
CCTGCCAGCCTGGAGGAGCTCCCAGAGGTCTACCCAGAAGGACCCAGTTC
CTTACCAGCCTCCCTTTCTCTGTCAGTGGGGACGTCATCAGCCAAGCTGG
AAGCCATTAATGAACTAATTCGTTTTGACCACATATATACCAAGCCCCTA
GTCTTAGAGATACCCTCTGAGACAGAGAGCCAAGCTAATGTGGTAGTGAA
AATCGAGGAAGCACCTCTCAGCCCCTCAGAGAATGATCACCCTGAATTCA
TTGTCTCAGTGAAGGAAGAACCTGTAGAAGATGACCTCGTTCCGGAGCTG
GCTACTGGATGCTTACAGTGACTGCAGCCACTGCCCAAAGCCATCTTCCTG
CCTACTGGATGCTTACAGTGACTGTGGATACCGGGGGTTCCCTTTCCCCAT
TCAGTGACATGTCCTCTCTGCTTGGTGGTAACCATTCTTGGGAGGACACT
TTTGCCAATGAACTCTTNTCCCCAACTGATTAGTGTCTAAGGAATGATCC
AATACTGTTGCCCTTTTCCTTGACTATTACACTGCCTGGAGGATAGCAAA
GAAAGCCTGCTGGACCTGCCCG

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## Table 4

>Sequence I

AGGTACAGGAACTTGATAATCATTGTTGTTGTTTTATCATTACCATCAT
CTCCATTAGCATCAGCATCACAGCTTGTGTGTTGTCTTTATCATTACCATCAT
CTCCATTAGCATCATCAGCATCACAGTTGCAGTATGGGGATCACATTAAG
TGATGCGGCAAGATCAGGAAAACCATTATCAAGACAATGTCCAGTTTGGA
TGTGTAAATATTATCCTGTGCTTCTTTGGCCCATTTAGCAAACACTNTCTT
TTCAGTGATAAACCTATGACCCCCATATGGNGCATGTTCATGAAGAAAAT
ATTCATCACACTCATCTCTTCCTTGTTCATAAATAATGGTAGGGGACTTTT
CTATACCCTTCTGTCTTGCAGTAGGTGTCATTTATCATCCCGTAGACGTG
AATGCCATAACAGGCGTCCATGGCCAGAATGAAGGTAAACCACCCTGTGC
TGAGATATGAGCCAGACTGGACTCTTCTCCCAGTTTCCTTCTTAAAA
ACTCCATCACAGTAACTCATGCGCTTCTCTGTGGTCACGTATATTTGGGC
ATTCGGATAGATACCAACTGTCTTTTTCAACATGTTGTAAACGATGCCAT
TGCCATCTTTCCTCATATTGCGGAAAGGTCCCCAAATAACATAAATAGTA
GTATTCGCTTCCTTGAAAAAAATAATCAAGGTTTTTTTAGCAAAAAGAGGAAC
GCTGGTATGGGACACAACTCGAATCATGGTCAT

T

>Sequence 3

CCGGGCAGGTACCCGGCTGGCCAAGGAGAAGGAGCAGAGCCTCACGGCAG
AAAAGGATGAGGACGAAGAAGAACGATGCCTCTCTGGCCAACTCCTCCACC
ACCACTTTGGAGGACAAAGGCCTTGGCCATGCCACTTTTTGGCCGCGAGGC
CACCAAATTTGAAGAGGAGGAGAAACCTGACAAGGCCTGNGAAGCCAGAC
CCCCACGAGAGTCCAGCGATGTTCCCCCCACGAAGAGAAAATAACTGGATC
TTTATTGATGAGGAGCAGCCTTTGCGGTCAGAGGACAAGCCCGGGGCCG
GGGCCGAGGTTTCAGAGAGTTCACTATTCGTGTCGGCCTGCTGGCGGAA
ATGGGAGCGGCCTCTGTGGTGGGGGGCCCCGCACATCTAC
TGCAGCAGTCAACGCA

>Sequence 4

TTACCCTITAATTCATAANTITCAAAACCCCCCCTTACTATTAAAATTCC
ACNCCTTTCCCCCTTAAAACTCCCTTTTCTCTTTTTTTCCAAACTTC
CCATTACCCAATACCTTTCCNCTTTTTCTCTTTCAAAAAACCTTACCCTTT
TTTATAATTCACCCTTTAATTATTTAAATTCTCTATAAATCCCTTCTCTC
CAACTTTTCTTTATTTCACAAACCCTCCTTTAAATCCCACCCTTTTCCT
TTATCCTAAACTATTTTCTTAAATCAACCCCTTTAAACACAACT

>Sequence 5

ACATTCAGCAAGCTCCGGTCGATGGCCTGCACCTCTGGCTC

>Sequence 6

CCGGGCAGGTACCCTTTTCTTCCAGCCCAGAGCTAGACTTCTGGATGCTG
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GGTTATGGCATATACTTGCAGTGCCATTAGAAGCATTGGCAATCCCTGAT
CTTTTTGATAGTTTAAGGCTTAGAATCATCAAAAGTTCCAGGTTCATATC
CTTCTAAAATGGAAGAAATGGAGGAAGTTCCAAGTGTGGTACCT
>Sequence 7

GGÁGCCGCGGAAAGAGTAGGGCTCCCCAGACAACGGGGTCCGACGAGCAG TTGGGCACGGGCTGAGTCCGCCTGCCGGCAGAATGTCCCTGGCTGCTTAT TGCGTCATCTGTTGCAGAAGAATAGGAACCTCTACTTCCCCACCAAAAAG TGGCACACACTGGAGAGATATCAGAAATATAAAAGTTTACTGGATCAC

> Page 1 of 990 of Table 4

### Table 4

TTATTTTAGGAGGTTCTTTATTTCTTACATATGAAGTTCTGGCCCTGAAG AAGGCTGTGACATTAGATACTCAAGTGGTAGAACGAGAAAAAATGAAGTC ATATATATATGTGCACACAGTTTCTTTAGATAAAGGAGAAAATCATGGTA TTGCCTGGCAGGCAGGG

>Sequence 8

>Sequence 9

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ATTTGCCCGTTGTAAAGCTCATTAAGGCCAACTTTTACTTTCAATATGTG
ATTCTGCAGAATTAATTTAAGGAGGCGCTGATCCATGCTGAGAGTATCAT
CAGAAAATGCATTATTCACAGGTGCCAGCAAAGTGTATTCTCCATCTGGC
CTCAGAGCAGATGCCAAGCCTAATTGGGCCACAAGATCCGTGAAGGTGGT
TTGCTGTTTTCCAGCCAGCTCAATAACTTGTTTGGCAGAATCAGGAATTA
GGACCTGATCAATCAAATGGATCACACCATTATTTGTCACCATATCTTT
TTGTTCACCATTTTTGATTCCATTAACTGTTATACTGTCACCGTCACATCC
TATCTCAATTGTATTTCCTTCCAGCGTCTCAAAGACTGCTCCTCCCATAA
TAGACTCAGAACACTGGAGAGTATTTAAGATGTGGTACCT
>Sequence 12

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## Table 4

AGGTACCACATCTTAAATACTCTCCAGTGTTCTGAGTCTATTATGGGAGG
AGCAGTCTTTGAGACGCTGGAAGGAAATACAATTGAGATAGGATGTGACG
GTGACAGTATAACAGTAAATGGAATCAAAATGGTGAACAAAAAGGATATT
GTGACAAATAATGGTGTGATCCATTTGATTGATCAGGTCCTAATTCCTGA
TTCTGCCAAACAAGTTATTGAGCTGGCTGGAAAACAGCAAACCACCTTCA
CGGATCTTGTGGCCCAATTAGGCTTGGCATCTGCTCTGAGGCCAGATGGA
GAATACACTTTGCTGGCACCTGTGAATAATGCATTTTCTGATGATACTCT
CAGCATGGATCAGGCCTCCTTAAATTAATTCTGCAGAATCACATATTGA
AAGTAAAAGTTGGCC

>Sequence 14

>Sequence 16 AGGTACATGGATGAAAACTAAAGGCTCGAGTTAATCACATTGTAGTTTTT AAATTTCTACAGCCTAGAGCTCACTAGTCACAGGTCTTTTAGGTCCTTCT GGATGTCCCACAGGGTATCTGCACTTTTCTTGAGCTGAGCAACCTCATCA TCCTTTAGCTTCTGGTTGATAACGCTGGTTAATCCCCGGGCATTGAGGAT ACATGGAAGGCTCAGGAAGACTTCATTCTCAATGCCATACATCCCCTTTA CCATTGTTGACACGGGATGAATCCTGGATAGATTTTTCAACATGGATTCA ATAAGATCAGCCACACTTAATCCAATAGCCCAGTTGGTATATCCTTTTAG AATTTTCACTATCATTGTCAGTTCCCATTTCTGGATTCAATTCCTGGAGA GAAACACCTGCCACATTCACACCACTCCACACAGNCACACTTGAGTCGCC ATGTTCCCCCAAAATCCATCCATGGCAGCTGCTGGGATGAATGCCAAAGT TTTCAGCCATAAGGTAGCGAAATCTAGCAAAATCCAGATTACATCCACTT CCAATCACGCGGTGTTTGGGTAATCCACTTAGTTTCCGGGTAGCATACGT AAGAATGTCCACTGGGTTGGGAACCCACATTATGATGCAATCAGGACTGG ACCTG

>Sequence 17

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> Page 3 of 990 of Table 4

#### Table 4

>Sequence 18

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AGGTACTTGTCCCGGCCTTGCCTCATGTTCTCGTTGTGGATGATGTCATT GTGGGTCCTCTTATTCTCATCTCGGGCCTGGGACAGCTCGCTGCTCAGCG TCAGCAGCTGCCGCTGCACACGCTCGTTCTTCTCTCGCCTCAGTGATGCGC TTCTCCTCATTGCGGTCATCCCGGATGCCCTCACTAGACAGCTCCGCGCT GTAGCCCGTGGGCTCTGCCCCTCATCCTGCAAGCTCTCCTGGACATGGT AGCTCACCGGCTCGTACCTGCCCG

>Sequence 22

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#### Table 4

CAGAAAATGCATTATTCACAGGTGCCAGCAAAGTGTATTCTCCATCTGGC
CTCAGAGCAGATGCCAAGCCTAATTGGGCCACAAGATCCGTGAAGGTGGT
TTGCTGTTTTCCAGCCAGCTCAATAACTTGTTTGGCAGAATCAGGAATTA
GGACCTGATCAATCAAATGGATCACACCATTATTTGTCACCAATATCCTTT
TTGTTCACCATTTTGATTCCATTTACTGTTATACTGTCACCGTCACCATCC
TATCTCAATTGTATTTCCTTCCAGCGTCTCAAAGACTGCTCCTCCCATAA
TAGACTCAGAACACTGGAGAGTATTTAAGATGTGGGACCT
>Sequence 23

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TCCCAAATGTGGAATTGACTGCCTATGCCAAGTCCCTGGAAAAGGAGCTT
CAGTATTGTGGGGCTCATAAAACATGAATCAAGCAATCCAGCCTCATGGG
AAGTCCTGGCACAGTTTTTGTAAAGCCCTTGCACAGCTGGAGAAATGGCA
TCATTATAAGCTATGAGTTGAAATGTTCTGTCAAATGTCTCACATCTA
CACGTGGCTTGGAGGCTTTTATGGGGCCCTGTCCAGGTAGAAAAGAAATG
GTATGTAGAGCTTATATTTCCCTATTGTGACAGAGCCATGGTGTTTTGT
AATAATAAAACCTCATAGGAAAAACCCAATTAAGGGGCTTGTACCTTGGC
CCG

>Sequence 24

>Sequence 25

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GAGATTCAGAATATGAAGGAGGAAATGGCTCGTCACCTTCGTGAATACCA
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TTTTCCTCCCTGAACCTGAGGGAAACTAATCTGGATTCACTCCCTCTGGT
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AAATTGCACACACTCAGGGCAGCAATATTTTACCCGCCAGAATAAAAAAG
AAATCCATATCTTAAAGAAACCGCTTTAAGGGCCTTTCTGCAGTTTTTAA
GGAACGCAGAAAAAATTTGGAAAACGAATAACTCTTGATCTTACAACCCCC
CCTCTTCAGGATTTGAAAAAAAGTTTCACCATAACGTGTCTCCGAGGGGGG
CGGGGTACACACTTTTTTTAACGGTTTTTTGGGGTCATTCACCCCTTGGTTTT
TTTGGCAGAGTTCACCCAGGGGGAAAGGTTT

AGGTACTACTTCTTGGTTAAAAGGCCACTGGTAGAGTCATCTGAGTGTAG
AGAATGTCCCTTCACTGGAAAAAATCCACTGGCTCCCAAGAAAAGAAA
ATGGTCTGAAGCCTCTGTTGTGGCTCTCACAACTCATCTTTCCCTAAGTC
ATCAAGCTCCACATCGCTGAGGTCAATGTCATCCTCCACGGGAAGCTCGC
CATCCCTGCCGTCCCAAGGCTCTCTCTCAACGATGGTAGGGAAAGCCCCG
CCTCCTACAGGTGCCGTGGAGCCACGCCCAAAAGAGAGCTCCCTGAGAAA
CTCGTTGATGCCTTGCTCACTGAAGGAGCCTTTTAGCAGAGCAAATTTCA
TCTTGCGTGCATTGATGGCGGCCATGGCGGGGTACCT
>Sequence 26

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TATTTCGTTGATATGTATGCTATACTTGCCCGTCTGAGTTTCNNNCTGCA
GAGGAGGGCGTGTACGTACTCACTATTCACTATATGGCGAACTGCACCGT
GGTGGCGGCCGAGGTACTGTGGATATTTAAAATATCACAGTAACAAGATC
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TTTGCATCTTGGTTGGCTGCATATGCTTTCCTATTGATCCCAAACCAAAC
TCTTAGAATCACTTCATTTAAAATACTGAGCGGTATTGAATACTTCGAAGC
AGAACAGGCAATGTGCAGCCCTCATTTATGAGAAACCCTCAGGAAACTC
CCAGGGTGATGCTTGGAGAAGCTGTGAGTTGAGCTGAAGCTGGAGAACTC
TCTCCAGAGCAGAAGGGCTTAAGAAAGAAAGAAGAACTCTAAGCTGGGTC
TGCTAACATCACTCCAGTTTAGATGGATCTTGGCAGAGACATGCTTGT

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TCCTCTGGATTGGAAAGATGATTTACTCTCGGGAATCTTCTCTGTCAGCC
TGTGCCTCGGCCGCTCTAAAACTGGAGGATTCCTCCGGCTGGAAAGAATT
GGTGTCAAGATTATTTGGCGCCATTTGCTCCAGGGATGCTTTTGGAAGCCA
AATGGGGTTGCCTAGGAAAACTTGCTGAACCCTGGGGGGAACCCGGTCCC
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GAACCCGGCTTTTGTTATTGCCCCTGGGGGCCTATGGGCTTAAAACTCCA
TGACGGC

>Sequence 27

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CAATCCAGTTTGCTGAGATGAAGCTGAGACCAAGCAACTTCAGAAATCTT
GAAGGCAGGCGCAAACGGGCATAAATTCCAGGGACCACTGGGTGAGAGAG
GAATAAGGCCCAGAGCGAGGAAAGGATTTTACCAAAGCATCAATACAACC
AGCCCAACCATCGGTCCACACCTGGGCATTTGGTGAGAGTCAAAGCTGAC
CATGGATCCCTGGGGCAACAGCATGGGCCTCACCTCCTCTGTG
ATTTCTTTCTTTGCACCAAAGACATCAGTCTCCAACATGTTTCTTTTTT
TTGTTTGATTCAGCAAAAATCTCCCAGTGACAACATCGCAATAGTTTTTT
>Sequence 28

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>Sequence 29

>Sequence 30

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#### Table 4

CGGGCGTTTAGAACTAGGGACCCCCGGGCTTGAGAATTCATATT >Sequence 31

>Sequence 32

AGGTACAGTCCTGATTGCATCATAATTGTGGTTTCCAACCCAGTGGACAT TCTTACGTATGTTACCTGGAAACTAAGTGGATTACCCAAACACCGCGTGA TTGGAAGTGGATGTAATCTGGATTCTGCTAGATTTCGCTACCTTATGGCT ACATGGCGACTCAAGTGTGGCTGTGTGGAGTGGTGTGAATGTGGCAGGTG TTTCTCTCCAGGAATTGAATCCAGAAATGGGAACTGACAATGATAGTGAA AATTGGAAGGAAGTGCATAAGATGGTGGTTGAAAGTGCCTATGAAGTCAT CAAGCTAAAAGGATATACCAACTGGGCTATTGGATTAAGGGTGGCTGACC TTATTGAATTCATGTCGAAAAATCTATCCAGGATTCATCCCGTGTCAACA ATGGTAAAGGGGATGTATGGCATTGATAATGAAGTCTTCCTGAGCCTTCC ATGTATTCTCAATGCCCCGGGATTTACCAGCGTTTTCAACCTAAGCCTAA GGATGATGAGGTTGTTCAGTTAAGAAAAGGGCTAAACCCTGGGGGGCCCT CCCGAAGGACCTTTAAGACCTGTGACTAGGAACTTTTTGGTGGCAAAATT AAAATAACTCCATGTGCTAACTCCACCCTTAATGATACCCCCGAACCTGG GCCGTCTAAAATAGGGGATCTCCCGCCTGGAAAATTTCT >Sequence 35

CCGGGCAGGTACATGACCCCTTCATTGGTTGTCAGATTTTCCTCGTGGGC
AGCCATGGGGCAGAACCCAAACTTCTGGTCGGCATCATAGTTCTGTGTGG
TCCCACACCACTTCATGTTGTCTCTTCTGCCCTCAGAAGTGCAATCAGTG
TAATTGTGGTTGTTGTATAGGAAGGGGAAGTGGCACAAGGCACCATTGGA
ATTTCCTCCTCGAGTCTGAACCAAAACAGTGTGGTCTGTGCAGAAAGAGT
ATTTCTGGTCCTGCTCATAATTCGAAGTTGTGCTGCACCAAAGATGTTCG
TCCTGTCGCCCTTCTGTGGTGCAGGAGTAGAACGTCCTGCCATTGTAAGT
GAATGGTAAGACACATGGCTCTCCATTTGAGTTGCCACCGTAAGTCTGGG
TTACAGCTGTCTCTTGGCAGCTGACTCCCTTGCCCACGGCACGTGCCAAGC
ATTTGCTTATTTCCTTGGGGGCTTCAACCACTGGATCCCCACAGAGTATAC

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# Table 4

>Sequence 38

>Sequence 37

AGGTACCTTACAAAAGTTAATGCATTAGACACTTCAGATGTTAACTGCTC TAAACAAAACTCCTAAGTCTGTCCTATGCAATATATATTTTATATACATA TATATTTTTACATAGAATACCCACAAAGTGCAAGCCAATAATAACATTGC AGAAAAGTAATACATATCTGCTAGGTGACAATATCAAACAATTCAGGGAA TAATTTTACTTTAATTAACATTAACAGAATTTCTTTTTCCACTTCAAATC AATCATATTTCTGTCATCTGCAACCTAAGATATTTTTTAGATTGTCTCCC TATTCTTTGATTCAAAAGCCAATTACAGAAACTATGAACTTGACCTAATT CTGGTTTTTGACAATTATGAGACAGAAATAAAGAAATGCAAGCAGTTCTT TTCTTTGCACACTGACCATTTTTTAATTACATCATCCTCTATGATGATGG TGCTTTCACAACTGCAGCTCTCCTGTATGTCAAAATCATTCTGGTTTCCA GGTAAATGGACAAAGGAGATTTGCCTTCAGTGTCTAGAAGGCAATTTACT TTTCAGCTGCCTTAATTACCTATAGGTTAAAGAAAGGAATGCCACATATA GGGTCCCTTAAACATCTAAAATGGGAGGTTGCCTTCAAGGGCACCATTCC CAAAATTTGAATCAAGGTCCAAGAAGCTTTCATATATGTTACAGTATGTT CACTGGGAATATGTCTCTGGCCAAGGTTAAAGGTGTGACAAATTTAAG >Sequence 39

AGGTACTCCAGGCCGGGACTCAGGTTATCAAAAGTGCAGGAGCTCTGATC
AGCATGGACCACTTCTTCCAAAGAATTTCCCTGCTGGCCGTTTGTAGGGG
TTGTGGTAATTCTATAACCAGTAATGTCTGGGGTGGTGCTCCTCTCCCAG
GAGACTGTGAGCACTCCAGTGTCAGGGTTTGCCTCCAGATGCAAGTTTGT
TGGTGGAGACAATGGTGTCACCACTTTGTTTACAATTGGCGCATCTCTTT
CCTGTCCATCTCTCAGGACTTGGATGGTGTAGACGTATTCTACTCCTGGA
GTCAAGCCGGACACAACGATGCTTCCTGAGTCTGAAGTCACTTCTCTGTGG
TGCCTCTCCCTCGCTTGGTTGGTCGTACCT

>Sequence 40

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### Table 4

AGGTACCGGAGACAGGTGCAGTCCCTCACCTGTGAAGTGGATGCCCTTAA
AGGAACCAATGAGTCCCTGGAACGCCAGATGCGTGAAATGGAAGAACT
TTGCCGTTGAAGCTGCTAACTACCAAGACACTATTGGCCGCCTGCAGGAT
GAGATTCAGAATATGAAGGAGGAAATGGCTCGTCACCTTCGTGAATACCA
AGACCTGCTCAATGTTAAGATGGCCCTTGACATTGAGATTGCCACCTACA
GGAAGCTGCTGGAAGGCGAGGAGAGCAGGATTTCTCTGCCTCTTCCAAAC
TTTTCCTCCCTGAACCTGAGGGAAACTAATCTGGATTCACTCCCTCTGGT
TGATACCCACTCAAAAAGGACACTTCTGATTAAGACGGTTGAAACTAGAG
ATGGACAGGTTATCAACGAAACTTCTCAGCATCACGATGACCTTGAATAA
AAATTGCACACACTCAGTGCAGCAATATATTACCAGCAAGAATAAAAAAG
AAATCCATATCTTAAAGAAACAGCTTTCAAGTGCCTTTCTGCAGTTTTTT
AAGAGCGCAAGATAGATTTGGAATAGGAATAAGCTCTAGTTTTTTAACAAC
CGACACTCCTTCAAGATTTAGAAAAAAGTTTACAACATATCTAAGATCC
AGAAAAAACTTGGGCTAGAATATTTTTTAAAAGGATTTGGATACTATTAA
AACGGCTTTTTTTTTCAGCAGGATTCCACCACTTTTGGTCTGGTTAATG
>Sequence 41

AGGTACGATATACGAAGACTCTGAGCTGTTTGCCTCCGATGGTTTCCAGT
ATTTGCCCGTTGTAAAGCTCATTAAGGCCAACTTTTACTTTCAATATGTG
ATTCTGCAGAATTAATTTTAGGAGGCGCTGATCCATACTGAGAGTATCAT
CAGAAAATGCATTATTCACAGGTGCCAGCAAAGTGTATTCTCCATCTGGC
CTCAGAGCAGATGCCAAGCCTAATTGGGCCACAAGATCCGTGAAGGTGGT
TTGCTGTTTTCCAGCCAGCTCAATAACTTGTTTTGGCAGAATCAGGAATTA
GGACCTGATCAAATGGATCACACCATTATTTGTCACAATATCCTTT
TTGTTCACCATTTTGATTCCATTTACTGTTATACTGTCACCGTCACATCC
TATCTCAATTGTATTTCC

>Sequence 42

>Sequence 43

AGGTACAGCTGTCTGCATTGAAAATTCATGCATGGAGAAAGGGAGTAAGC AAGGGAGAAACGGTGCGATTCACATATTCCGCGAGATCATCAAGCCAGCA GAGAAATCCCTCCATGAAAAGTTAAAACAAGATAAGCGCTTTAGCACCTT CCTCAGCCTACTTGAAGCTGCAGACTTGAAAGAGCTCCTGACACACCTG GAGACTGGACATTATTTGTGCCAACCAATGATGCTTTTAAGGGAATGACT AGTGAAGAAAAAGAAATTCTGATACGGGACAAAAATGCTCTTCAAAACAT CATTCTTTATCACCTGACACCAGGAGTTTTCATTGGAAAAGGATTTGAAC CTGGTGTTACTAACATTTTAAAGACCACACAAGGAAGCAAAATCTTTCTG AAAGAAGTAAATGATACACTTCTGGTGAATGAATTGAAATCAAAAGAATC TGACATCATGACAACAAATGGGGTAATTCATGTTGTAGATAAACTCCTCT ATCCAGCAGACACCTGTTGAAAATGATCAACTGCTGGAAATACTTAAT AAATTAATCAAATACATCCAAATTAAGTTTGGTCGTGTAGCACCTTCAAA GAAATCCCCGTGACTGCTTATAGGCCAATTATTAAAAAAATACCCCAAAAT CTTTGATGGAGTGCCTGTGGAATAACTGAAAAGGAGACCCAGAAGAACGA TTCATTCAGGTCCTGGAATAAAAAACACTAGGATTTCTACCGGAGG >Sequence 44

AGGTACTTGAGCTGTGAGGTCATCGGAATCCCGACACCTGTCCTCATCTG GAACAAGGTAAAAAGGGGTCACTATGGAGTTCAAAGGACAGAACTCCTGC CTGGTGACCGGGACAACCTGGCCATTCAGACCCGGGGTGGCCCAGAAAAG

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### Table 4

>Sequence 45

AGİTACGATATACGAAGACTCTGAGCTGTTTGCCTCCGATGGTTTCCAGT
ATTTGCCCGTTGTAAAGCTCATTAAGGCCAACTTTTACTTTCGATATGTG
ATTCTGCAGAATTAATTTAAGGAGGCGCTGATCCATGCTGAGAGTATCAT
CAGAAAATGCATTATTCACAGGTGCCAGCAAAGTGTATTCTCCATCTGGC
CTCAGAGCAGATGCCAAGCCTAATTGGGCCACAAGATCCGTGAAGGTGGT
TTGCTGTTTTTCCAGCCAGCTCAATAACTTGTTTTGGCAGGAATCAGGAATTA
GGACCTGATCAATCAAATGGATCACACCATTATTTGTCACCAATATCCTTT
TTGTTCACCATTTTGATTCCATTTACTGTTATACTGTCACCGTCACATCC
TATCTCAATTGTATTTCCTTCCAGCGTCTCAAAGACTGCTCCTCCCATAA
TAGACTCAGAACACTGGAGAGTATTTAAGATGTGGTACCT

>Sequence 46

AGGTACGATATACGAAGACTCTGAGCTGTTTGCCTCCGATGGTTTCCAGT
ATTTGCCCGTTGTAAAGCTCATTAAGGCCAACTTTTACTTTCAATATGTG
ATTCTGCAGAATTAATTTAAGGAGGCGCTGATCCATGCTGAGAGTATCAT
CAGAAAATGCATTATTCACAGGTGCCAGCAAAGTGTATTCTCCATCTGGC
CTCAGAGCAGATGCCAAGCCTAATTGGGCCACAAGATCCGTGAAGGTGGT
TTGCTGTTTTCCAGCCAGCTCAATAACTTGTTTGGCAGAATCAGGAATTA
GGACCTGATCAATCAAATGGATCACACCATTATTTGTCACCAATATCCTTT
TTGTTCACCATTTTGATTCCATTTACTGTTATACTGTCACCGTCACATCC
TATCTCAATTGTATTTCC

>Sequence 48

>Sequence 49

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# Table 4

CACGCTGGTTTTGCATCTTCAGGAGACGCTCGTAGCCCTCGCGCTTCTCC
TCGGCCAATTCGCGGAAGAAGTGGCTCACGCCTTCCAGAGCCACATCATC
GCGGTCGAAATAGAAGCCCAGAGAGAGGTAGGTGTAGGAGGCCGTAAAAA
CGGTGCTGGCAGGTCCCAGAAGCAGGAGATGGCCGAGAAGATGGTCCCGG
AGGTTGCAAGCGGAGAGAATCGGAGGGCGGTCGGAG
>Sequence 51

AGGTACAACTTCATTGAACTGCCCTACCACGGGGAAAGCATCAGCATGCT
GATTGCACTGCCGACTGAGAGCTCCACTCCGCTGTCTGCCATCATCCCAC
ACATCAGCACCAAGACCATAGACAGCTGGATGAGCATCATGGTGCCCAAG
AGGGTGCAGGTGATCCTGCCCAAGTTCACAGCTGTAGCACAAACAGATTT
GAAGGAGCCGCTGAAAGTTCTTGGCATTACTGACATGTTTGATTCATCAA
AGGCAAATTTTGCAAAAAATAACAAGGTCAGAAAAACCTCCATGTTTCTCAT
ATCTTGCAAAAAGCAAAAATTGAAGTCAGTGAAGATGGAACCAAAGCTTC
AGCAGCAACAACTGCAATTCTCATTGCAAGATCATCGCCTCCCTGGTTTA
TAGTAGACAGACCTTTTCTGTTTTTCATCCGACATAATCCTACAGGTGCT
GTGTTATTCATGGGGCAGATAAACAACCCTGAAGAGTATACAAAAGAAA
CCATGCAAAGCAACGACTACTTTTGCTACGAAGAAAAGCTCCTTTCCTGC
ATCTTTCATAGTTCTGGTAAAATATTTTTGTACCTTC
>Sequence 52

AGGTACATCATTTCATGTCATCCTGTTGGCACTGATGAAGAACCCTTACA
GTTCAGGGTTCCTGGAACTTCTACCAGTGCCACTCTGACAGGCCTCACCA
GAGGTGCCACCTACAACATCATAGTGGAGGCACTGAAAGACCAGCAGAGG
CATAAGGTTCGGGAAGAGGTTGTTACCGTGGGCAACTCTGTCAACGAAGG
CTTGAACCAACCTACGGATGACTCGTGCTTTGACCCCTACACAGTTTCCC
ATTATGCCGTTGGAGATGAGTGGGGAACGAATGTCTGAATCAGGCTTTAAA
CTGTTGTGCCAGTGCTTAGGCTTTGGAAGTGGTCATTTCAGATGTGATTC
ATCTAGATGGTGCCATGACAATGGTGTGAACTACAAGATTGGAGAGAAGT
GGGACCGTCAGGGAGAAAATGGCCAGATGATGAGCTGCACATGTTTACGA
TAGATGGGAAAAGGAGAATTCAAGTGTGACCCTCATGAAGCAACGTGTTACGA
TGATGGGAAGAGAATTCACGTAGGAGAACAGTGGCAGAAGGAATATCTCG
GTGCCATTTGCTCCTGCACATGCTTTGGAAGCCAGCGGGGCTGGCGCTGT
GACAACTGCCCGAGACCTTCGGGGGTGAACCCACTCCGAAACACACT

>Sequence 53

AAGGGTAATGGCCAATTGAGGCTTAATGCCTTTAAATGAACCTTGGGCGC

>Sequence 54

AGGTACGATATACGAAGACTCTGAGCTGTTTGCCTCCGATGGTTTCCAGT ATTTGCCCGTTGTAAAGCTCATTAAGGCCAACTTTTACTTTCAATATGTG

> Page 11 of 990 of Table 4

## Table 4

ATTCTGCAGAATTAATTTAAGGAGGCGCTGATCCATGCTGAGAGTATCAT CAGAAAATGCATTATTCACAGGTGCCAGCAAAGTGTATTCTCCATCTGGC CTCAGAGCAGATGCCAAGCCTAATTGGGCCACAAGATCCGTGAAGGTGGT TTGCTGTTTTCCAGCCAGCTCAATAACTTGTTTGGCAGAATCAGGAATTA GGACCTGATCAAATGGATCACACCATTATTTGTCACAATATCCTTT TTGTTCACCATTTTGATTCCATTTACTGTTATACTGTCACCGTCACATCC TATCTCAATTGTATTTCCTTCCAGCGTCTCAAAGACTGCTCCCCATAA TAGACTCAGAACACTGGAGAGTATTTAAGATGTGGTACCT >Sequence 55

>Sequence 58 AGGTACTCAGAAGTGTCCTGGAATGGGCCCATGAGATGGTTGTCTGAGA GAGAGCTTCTTGTCCTACATTCGGCGGGTATGGTCTTGGCCTATGCCTTA TGGGGGTGGCCGTTGTGGGCGGTGTGGTCCGCCTAAAACCATGTTCCTCA AAGATCATTTGTTGCCCAACACTGGGTTGCTGACCAGAAGTGCCAGGAAG CTGAATACCATTTCCAGTGTCATACCCAGGGTGGGTGACGAAAGGGGTCT TTTGAACTGTGGAAGGAACATCCAAGATCTCTGGTCCATGAAGATTGGGG CAGGGGCTTGCTCTTCTGATTATTCTTCAGGGCAATGACATAAATTGTGT ATTCGGTTCCCGGTTCCAGGCCAGTAATAGTAGCCTGTGTGACACCAGGG CGGGGCCGAAGGACCACTTTTCTGGGAGGAGGACCCAGGCTTATCATACT TGATGATGAAGCCGGTAATCCCTGGCACTTGGCGGCTGGCATGATACCAG CAAGGATTGGGTGTGGAGCCCAGAAACCCAGTTGGATGGTGCATAAAGGC AGGGGAGGCCTTAATACCCCAGGGGAGCTCTTACCCTTGGATTCAAGGGG ACCCTTGCCCGTTTATAAATAGTAGATCCCCCGGGCTGTGGGATTCCTTT CAATTTATTCTACCATATACCTGGGGGGGGCCCCC

> Page 12 of 990 of Table 4

### Table 4

CCTGATTGGAACCCAGTCCACAGCTATTCCTGCACCAACTGACCTGAAGT
TCACTCAGGTCACACCCACAAGCCTGAGCGCCCAGTGGACACCCCAAT
GTTCAGCTCACTGGATATCGAGTGCGGGTGACCCCCCAAGGAGAAGACCGG
ACCAATGAAAGAAATCAACCTTGCTCCTGACAGCTCATCCGTGGTTGTAT
CAGGACTTATGGTGGCCACCAAATATGAAGTGAGTGTCTATGCTCTTAAG
GACACTTTGACAAGCAGACCAGCTCAGGGTGTTGTCACCACTCTGGAGAA
TGTCAGCCCACCAAGAAGGGCTCGTGTGACAGACGCTACTGAGACCACCA
TCACCATTAGCTGGAGAACCAAGACTGAGACGATCACTGCCTTCCAAGTT
GATGCCGTTCCAGCCAATGCCAGACCATCACAGCC
AGATGTCAGAAGCTACACCATCACAGGTTTACAACCAGGCACTGACTACA
AGATCTAACCGGACCT

>Sequence 60

>Sequence 61

AGGTACAAGAGTGTTTCATGAAATCCGTTTTTAAAATGAACATCTCTGTG
TGCCACAGTTCCTAGGACTGGGGCAAGGACACAGTGTCAAGTCTTGTTTT
GAGGATGAGTCTCTGAAGAGACAGAATTCCTGCCAGAATGCGCACAGAAC
ATAAGTCAGCCAAGTGTGTCGTGCCAGGGATACTTTGACTTTGGTTTGCT
GCTGCTGCTAGGGATATTGGGAGGGTTATCCTTTCCAGGTTGTAGGAGAG
GGTTGTGGGTAAAGGTCTGTCGTAAAGGACCCCTGGCTGCTAGCTCCAAC
TGATTCCGCATGCGTTGTTCACGCTCTCGCAGCTGACGCGTCATTTCAGC
ATTTTTCCAGCCTTTTTTGAAGCTCTCTAGGAAGCCTTCCCGTGGAGGTA
ATTTGTCCAGGTCATGTACCTGCCCGGGCGGCGCCCTCGA
>Sequence 62

AGGTACTCAGAAGTGTCCTGGAATGGGCCCATGAGATGGTTGTCTGAGA GAGAGCTTCTTGTCCTACATTCGGCGGGTATGGTCTTGGCCTATGCCTTA TGGGGGTGGCCGTTGTGGGCGGTGTGGTCCGCCTAAAACCATGTTCCTCA AAGATCATTTGTTGCCCAACACTGGGTTGCTGACCAGAAGTGCCAGGAAG CTGAATACCATTTCCAGTGTCATACCCAGGGTGGGTGACGAAAGGGGTCT TTTGAACTGTGGAAGGAACATCCAAGATCTCTGGTCCATGAAGATTGGGG CAGGGGCTCGCTCTTCTGATTATTCTTCAGGGCAATGACATAAATTGTAT ATTCGGTTCCCGGTTCCAGGCCAGTAATAGTAGCCTTTGTGACACCAGGG CGGGGCCGAGGGACCACTTGTCTGGGAGGAGACCCAAGCTTTTCATACTT GATGATGTAGCCCGTAATTCTGGCACGTGGCGGCTGCCATGATACCCAGC AGGGAATTGGTGTGGCCCAGAAACCCAGGTTGGATGTGCCTTAATGG CAGTGGAGGCGTCCATAACCCCAGGGAGCCTCAACATTGGCATTCAAGGT GGCCTTGCCCGGCGCCCTTCTAAAACTATGGACCCCCGGGCCTCAGAAT TTATATAAGCTTATGATACCGTAACCTTAGGGGGGCCCCGTT >Sequence 63

 $AGGTACTGAGGAATGAATAGAAAGGCTTCCAGATGTCTAAAAGATTCTTT\\ AAACTACTGAACTGTTACCTAGGTTAACAACCCTGTTGAGTATTTGCTGT\\$ 

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### Table 4

>Sequence 65

AGGTACTGTGATATCCACATATTTTTGAGAAAAATTCCCAAGCCAGGCGA ATGTGGATTGGAATAAAGACATAGGCAGTGTATACCACCATAGCAATAAT GGTTAGTAAGATGGTGTTAAACATAGATCGCTCCCAGGGCTCTAAAACAG CACAGCAGCTAATGATTTGGTATTGATAGTAGAGCCAGGAGAAATATTCC TTCACACGCCTCAAATCCATGGTTGGCTCCTTCAAGCTGCAGTAAGTTTG TCCTAAGAAAGTCCAGGTCTGGTTCTTCAGCCTTGCTCCTTCGCGAAATG ACCTGTGTGTGTTAGTTCTCCTCTCTGGGTTGCTGTTTCCTCATCTCCC AGTTGGGTTATCTCCCTGCGGCTTAGGTGAGCCCGAGGCTTTGGCTCC TCCCCAGCTGACCT

>Sequence 66

TAATTTGCTGTTGCGGCTACACATGCTCCAGCTTTTTCCAGTTCGGGAAA
AACCTGTTCGCTGCACAGCCTTGCATTAAATTGAATTCGTGGCCAATCGC
CGCGGTGGATAGAGTGCCGGCTTATGTTTTATTTGGGGTCGCTTTTTTCC
GCCTTTACTGCCGATTAATATGAAACTTAAGGTTGGATTCTCCACCTGGG
CCTTGGCAATGAAAATTTCTAATTTTTAAAAGCCTTTTATTTGAATTACC
CGTTCGGACCCTTTCGAGGGGGGGGGCCCCCGGGGTACCCCAAGCTTTT
TTGTTTCCCCTTTTTAGTGGAGGGGTG

>Sequence 67

AGGTACAGAATCATATTCTAAGATTATGTGCAAATATATGTGTAGAAAGA GGCATTTAAAAAAAGAGGCAGGAGATTGAGAAGAGACATATTGAATGAGG CACTAATCTTTAGAAAAATGATCTTTTACTGAATCAAGCCATGCTCATTC CTTGCTGAATCCAACAGCCCCAAATCTCTTTTCTTATATTTGGCTGTAA TTTTTTTCCTTGCACCATCCTAGATTGTTAACAACCATTGCACAGTTGGC TCATGTATCCTTACACTCTGAGTTATAATAAGTTGTATTTTTATAAACAA ATACCTAAATATTCAAGTTTTAAGGCGCATGGAAACTGAATCTAGGCAAC GGGT

>Sequence 68

>Sequence 69

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#### Table 4

TAAGGTTGCTGAGCAGGAAATGCAGCTAGAGCCCATTACAGATGAGAGAG
TTTATGAAAGTATTGGCCAGTATGGAGGAGAAACTGTAAAAATAGTTCGT
ATAGAAAAGGCTCGTGATATTCCGTTGGGTGCTACAGTTCGTAATGAAAT
GGACTCTGTCATCATTAGCCGGATAGTAAAAGGGGGTGCTGCAGAGAAAA
GTGGTCTGTTGCATGAAGGAGATGAAGTTCTAGAGATTAATGGCATTGAA
ATTCGGGGGAAAGATGTCAATGAGGTTTTTGGCTTGTTG
>Sequence 70

GTCCTCTGTTTTTAAACTGTAAAGGACTCCAGCGGATTGTTCGAAGTCTC CGATATCCCGCGATCTGGTGGCCGCAGAAGAAAGAGGCCGAGTCGGCGGG GACTGGGAACCACCAGTTAGCGGCCTACGGGCAACCTCCCGGACGCGCG GCCGGGCCGACGTTAAACGTACCT

>Sequence 71

AGGTACCCGGCAACAGACCCTTTTTGCTGATATTAGCACCAGAGAAAGCT
TACAGCAATCTAAGGTCCCAGGCTCTGGGTTCTCAGATGCCAGTCATTAG
ATTCTCGTGGGTTAACAGAGATGGGAAAAGTCAATGGGGAAAATGTCGA
ATGATCGATTTCTTCGATTGTCGGATTGAGGGTGGCACAATGTCTTAGGC
GGCGGCGGGTAAGTGACTCAAGCGAACCTGTTCCTTCCCTAGGCGCCCCT
GTCTCCAAGAGGCGCCCCGAAGGTGATCCGCCCCCCAGAGCAGGAAACC
AGCCCACCAGTCCCAGCAAACTCTCCTCCGAGCCTGGGATGAGGAAA
>Sequence 72

AGGTACAGAATCATATTCTAAGATTATGTGCAAATATATGTGTAGAAAGA GGCATTTAAAAAAAGAGGCAGGAGATTGAGAAGAGACATATTGAATGAGG CACTAATCTTTAGAAAAATGATCTTTTACTGAATCAAGCCATGCTCATTC CTTGCTGAATCCAACAGCCCCAAATCTCTTTTCTTATATTTGGCTGTTAA TTTTTTTCCTTGCACCATCCTAGATTGTTAACAACCATTGCACAGTTGGC TCATGTATCCTTACACTCTGAGTTATAATAAGTTGTATTTTTTATAAACAA ATACCTAAATATTCAAGTTTTAAGGCGCATGGAAACTGAATCTAGGCAAC GGGT

>Sequence 73

TGÖNNNTNNCCGCGTATACGGCTAATAGGAGCTCAATCGGAGCTCCACCG CGGTGGCCGCACGCCCTGGCAGGTACTTTCCTTAGCATATGTTTTCCTCA TATGTTCTGGGGTTTTAGACTGTAGACTAATCTGGAGTTGGAGTCTGTGC CTCTCCACTCTCCACCAACCAGGCGGGCCCATCACATACGTGATANGGAA AATACCTGAAACCCAGGCCAGCAGGCAGCTCGGCCATGGCTGAGAGGCTG TGTTTTAGAAACGAGGCTCTTGGGAATGGGGCAGAACTTTTTTCAGGCCT TTTCAAGAGCAATGGAGCTCCATTGCAATCAATACCCCAGTCTGCTTGTA GACGCGCTATTTCTTTCAGTGCTCCTTATGGCTCTGTTTGCCGTTT CATTTCTAGTACCT

>Sequence 74

AGGTACTTTAGTGTTTAGCAAAAAAGGGACTATGGAATGTCAAACAGGAA CATATATGTTAAACATAAACATGAAGCAGTGCCAGCTGCTGTCTGCCATA TAGTCATGCTTTGTTAATGTGGCACATCTTGCCATGATGGTGCCCTCATG AAACGAAGGATGCTGAAGCAGATGCCATTCTGTTTGCTTTGATCAGAAGC CACTCTCTGGTCAAGGAAGTATTTGTTTCATGCTTAATTATAACAAGTTC TCATCACAAAGATTATTTTCTTTCTCCAGATCTGGATTGTCTGCACTCAC

> Page 15 of 990 of Table 4

TTTATATTATTAGACAATCACTCAGATTGTTTATGTTTTATGTTTAGAA
ATAAGACAGTGATTCAGAGAGTCCCTGTATTTAGATGAAAGAACATTTTT
TAAACATATTGACTGTAAACACTGAAAATCATTAATTCTCAACAGTTGAA
GGTTTCTGACAGGAACGGCCCTTGGAAATTGTAAATGGGCACATTGTCAG
GTATGCCCATTGTTGTCACATTGGAGAAGATGGATTCTGTTCTCTCTGGA
GTCCTTTGTAATGCCAAGCTTCCTCTCCAGGGAACTGGCTTATTGTCATT
ATTTTGAAATAAATGCACTTCATAGTATTAAGTGGTTCATTGACTCTTC
TCTGGCTGACTGTATTCTGGAAGCAAGCCACTCAACTTTGGAACCCTTCT
CCTTGTACCAACTTTTTTGGTTGCCTTAAACCAACCTTATGGNTTCCTGG
TAGTTTCTGACAACACATGGTATAGCATGGACTTTTTTCAACAGATAAGCACG
>Sequence 76

>Sequence 77

>Sequence 78

>Sequence 79

>Sequence 80

>Sequence 81

AGGTACCTTTCTTTCCAGGCCATGGCAAAAAAAAATCCAATTATGTCCGT CTTGAGTCTGTGGTCTTGCTTCTTATGTAGTATTTCCTTTGTGAGCTGAA GATTAATGCATGGATTCACCTCCTTCAGCACATTTCATTTCAATTGTGAA GAAAAGATTCCAGGCACTGAATGTAAAATTGAACATGACATTTTCTTCTTCTGAGAGCTGGGTTGGTCTTAGTTGCTGTGAGGCTCTAGACAC CGACCATACAGGGCGTGGGGCTGCTCCTGGACATGAACATCCTCCGAAGT TCTCCCCAGTCCACTTTACCCGCTCTGGGCTCACCTCTGAATGTCCCCGC GTACCTGCCG

>Sequence 82

AGGTACGGGGACTGGTAGGTGGTTTGGATTCTGATAGGAGAAAACACTGC
ACACAGCAGGCCAGAGTGGGAATACCTGTATTCTCTATGGTAACAGTCAG
GTGAATGGAGAAACTGGAGAGATATTTTGACGGTTGTCTTTAAACTCAAT
GGAGGGCTTGTGTAGCAAAGATTGTAAACTGGCAGCTGCTGGTGGTGTAA
TGGATTAAATCAGCAGTGCTTATAGAAAAGAATTTGAGTGTTTTTAGATA
GGCAGATAGTCTCCTGTCTTCCCTGTTATCTTGGCTTCCCTTGTTTACGT
AGCTTATCTACCTCCATGGAGATATGAGTTTGAGATACTTGTAAGGTCT
GCCCAGGAGCAGATGTGTACCTGCCCG

>Sequence 83

GGGGCCATTGAGACTGCCATGGAAGACTTGAAAGGTCACGTAGCTGAGAC
TTCTGGAGAGACCATTCAAGGCTTCTGGCTCTTGACAAAGATAGACCACT
GGAACAATGAGAAGGAGAGAATTCTACTGGTCACAGACAAGACTCTCTTG
ATCTGTAAATACGACTTCATCATGCTGAGTTGTGTGCAACTGCAGCGGAT
TCCTCTGAGCGCTGTCTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTG
GGATGTCCCTGGACAAGAGACAAGGAGAAGGCCTTACGATCTACTGGGGG
AGTCCCGGAGGAGCACTCTCTTCTGTCCCGCTGGAACCCATGGTCCACTGA

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# Table 4

AGTTCCTTATGCTACTTTGACTGAGCATCCTATGAAATACACCAGTGAGA
AATTCCTTGAAATTCGCAAGTTGTCTGGGTTCATGTCTAAGCTTGTTCCA
GCTATGCACAATGCCCACAAGAATTCAACTGGATCTGGAAGACGAAAGAG
ACTGATGGTGTGGAACTGAACCCATTTTGATTGAGACCTACACAGGGCTG
ATGTCATTCATTGGAAACCGCAACAAACTTGGCTATTCCCTAGCCCGTGG
GAGTATTGGTTTTTGAGAGTCCTTTTGGTACCTA

>Sequence 84

CCGGGCAGGTACCCAGTGATTACTATATCGGATGGTGCAGGTCTCAGTTC TTTCCACCATTTTTTCCCCACCATATTTTATATGTTTACATAGGTGAGAC AAATGGACTTAGGCCAAAAGGTTTACAACTGGAGAACCAAGTTGGAAGCA GCTTAGTGAGTCAGTTTTTCTGACATGTAAGTATGGCTCTTTCAGAGCAC GAAGGAACTCTTGAGTCTGTTAAGTGAACTGAGTGTGTTGACAGTTTGAA CACACTCCTTCTGGCAGCAAAACAAACTGCTTGGCTTATTTCGTATGTTG AATCAGAGTAATTCCTTTAAACTGGCTTTTAATTTTCAAAGGTGGAAGCC TGCTCCATATACTCTGCTGGCGCTGTGCACCTTTTTAGTTTCAGAAAAGG ATGCTGGGCACCGATCTCTTTGGAAGCCTTACCTGGAGATTTTACCCAAT GCGTATACCTGCCCTGTTTGTTAGGAGCTCGAAGTGGTGAACACTCTTAC CAAATCTGTAATACCAAGGCTGATTACAGAGAGCACACGTGCATGAGTCT TTGTTTCTCCAGAGACTTTTATATATCTGCAGCTCTGTTGCCGAGCTGTT ACAAGATGTTCAGCTTCAGTCCCTGTTGTGGCTGCTGCACCGCAACCCCA **AACCGGTTCCTGGGCGTTGTAGACTATGGGTTCNCAGCTTCC** 

CCGGGCAGGTACCAGACCCGGTGAGAGCCCCCATTCCAATGCACCCCCAT CTCAGCTTCTGGCCAGAAGACCTGAGCAAGTCCCTCCTTCTTCCTGGCCT TGGCCTTCCCATGGGTGAACCAGGAGGGCTGGCTTTAATCTCCACCAGA CTCTTGCCCCGGGACTGTGATGGGCGATCGGCCACTTCTCAATAATCTTC CTGTTTTCCTTCCGCCTTCTGTTTGGCTGTAGACAGGACCAGTGCATCTA TAACACCACCTACCTGAATGTCCAGCGGGAAAATGGAACCATCTCCAGAT ACGTGGGAGGCCAAGAGCATTTCGCTCACTTGCTGATCCTCAGGACACC AAGACCTACATGCTTTTTGACGTGAACGATGAGAAGAACTGGGGGCT GTCTGTCTATGCTGACAAGCCAGAGACCAAGGAGCAACTGGGAGAGT TCTACGAAGCTCTCGACTGCTTGCGCATGCCCAAGTCAGATGTCGTGTAC CT

>Sequence 86

>Sequence 87

TTTTCCCCTTTTAGGAAGGGTAAAAAGCCCCCCGGGCCTACATTGGGCCA

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#### Table 4

GAACTTTGGCACTGGGNNNNNACTGAAATCTACCCTCAGACCTTATCCTA CATGTCTGTTAATTCCCCCTTAACTGTTTATAGGTTCATTTTGGAACCTGG CTAGTTGAAATTCCAGTAAAGTGCATTTATGTGGCCCAATGTTGCTTATA GTAAAAGATGGGCTCCAAAGCCATGAAAGTGCTTTAGGGCAAAACAGAAT CCTTCTGATACCTGCCCGGC

>Sequence 89

AGGTACTCATCCTTCCACACCATTGCCAACATTTAATATTACCATTTTTA AACTTTAATCAATCTGACAGGTGAAAAAAAAAGACTTCACTTTCTATGTAG CATTTCTTTTTAGTGAAGATGAACATTTTTTTCGTAAGTTCATTAACTT TTAAATTTTCTAAACAGCAGTGGATCCAATCAATACTCCTCAAGTTGCAT TTAAAATTTTAAAAAAAACACAGCTATAATCCTACCACTTTGGGAGGCCAA AATGGGAGGACTGCTTGAGGCCAGGAGTTCAAGACCAGCCTGGGCAACAT AGCAAGGTCCTGTCTCTTAAAAATAAAAAAATGTGTCAGATATGGCGGCG TGTGCCTGTATTCCCAGATACTCAGAAGGCTGAGGCAGGAGCATCAACTT GAGCCCAGGAACTTGAAGCTGCAGTGAGCCAGGGTCACTCCACTACATTC CAGCCTGGGTGACAGATCAAGACCCATTTGCAGATTGTATCATGTCTCCA GATTTCTGGACTTTATCAAATATTGTAAAAATTACATTANACCGGGACTG TGGCAATCCTTTATTACTGAGATCTGCCCTCACACGTTCTCCTACATGTC TGTAAGTCTCCACTAAGCTGTTTATTGCTGCATCTCGAACCTTGCTGTTT GGATCTGCAAGTAAGTGGCATTATGTGGCACACTCTTGCTTATAGTAAAG ACTGGCCTCAAAGCACTGAGTGTTTGCTTTAGGCAGAAAAGATGCCTTCTC **AAGTCTTGCCAGGG** 

>Sequence 90

CCGGGCAGGTACAATCCTGCCCTCAAGAAGGTTAAGGTCCAGTTGGAGGA GACTTAGGAGTTCAACTGACCCAGTTCTGCAACCTTAGGTGGCTGTCCTC ATCCTGACAGGAGACAGGGGACACACAAAAACAGTGATTTAGGCGTTAA CAAAGTGGCTTTACAAAGGTGTAGACAGAATATAGGAAATCCAACAAGGC CTGGTGGAGCACCATGAAGCTGGTGACAGCAGGGAACACCCGCGTACCT >Sequence 91

>Sequence 92

>Sequence 94

AGGTACAGACAACGGATTGAGCTACTTCCTAACACAGTGACTGGGATTCA

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# Table 4

AAATAAAATATTAACATATAATAAATGCTCTGCACAGAACATGCTGCAGA ATAAATAATAAATGGACAATAAATTATCCTGGTCCTGTATTGATAGAAAA GGAAAATAAAGACTAGAGGTTAAGGCTTGCCAAATGTCATGTATTTAGTT TGAGAACTTGTTGGTAGAGCAAAGGGAATTTCTTCCATAAACTTGAAAGT GCATTACACAAATATTTTTCTACTTAGTTCCTATAGCATTTCTTTGAGAA AAACAAAATTAGATTAATCCACTCTCCCCTACCTTAACTTTCCACACTAG TCTAAATTTTTGTTCCCTGGATGTATATTACAGATACATGTGGTTAATGT GTTCGAGGAGGATCCGCAAAAGTTGGTGAAACTGTGAATGTGAAAGCAAA ACCCATATTAACTGTCCCACTTTATTTGAGTGGGGAAAAAAGACCACCCA CTGACAGAGACCCAGGATATGATCAAATCCTAAGAAGGAGGATATGCCAC AAAATGCTCCGGCTTATTTTTCTAATGGCCTTCGATGCCGGGAACGAAAA CATTTGGAAGTTAGGGACTTAAAGAACTTGCTCCATCCAAAGATGAAAGA TTGCTTCCTCAACAGTTAAT

>Sequence 96

>Sequence 97

ACGTACACAGTACATCATCTATGGTCTATGCTTGAGAGTCAATATGGTGT
CACCTACCTGGAACCCTACGCACAGTATTTTTGAGAAACCCACTCACATG
TGTCAGGCAGTATGTTTGCCAAGGTGCCAACATGCAAGAATTTCAAAGCT
GGATGATACAAAGTATAAAACCTATAATTTTTGGCCAGGCGCAATGGCTCA
CGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGCGGCAGATCACCTGAG
GTCAAGAGGTCGATATCAGTCTGCCAACATGGCAAAACCCCGTCTCTACT
AAAAATATAAAAATTAGCCAGGCATGGTGGTACCTGCCCG
>Sequence 98

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### Table 4

GACCATTTCATTTTGAAGGGTTCCTATATATGCTTTTTTTCATTCTAACC
AATAATGGTGTTTAAGTTCTGTACCCT

>Sequence 100

>Sequence 101

TTAAGGACAGTTGCCGCTNANGAGAAATGCTCCACNCAATGATGGTCCCC TACATTCCGCAAACCAGCCTGCACATTACCTCTCCATACTGCAGCCCTAT ATATGGAAACTTCTTACATCACTTTGCTGTGTGTAGTCAACACAGGTGGG TTTTTGCTTGTAACCTCGGCACGACTGCTAGAACTAAGTGGGAGTCCCCA CGGGCCTGCGAGGAAATATCAAATATCCAAGCTTTATCCAATTCGCGTCC GACCCCAACCGGGGGGGGGGCGCCCCGAACCCTAGGTTTCTGTTTCC CTTAAAGGTGAGGGTGTAATTCGCTGGCTTGGACGTAATGCATTGTCATA GTTCCTTGGCCCGGGGNAAAGGGTTATACATAAAAATATGGCGCGAAGAA ATTACTGACGGAACAACAGTGGCAGTGGGAATAATTCAGGGGTGAAGTAT TTGCGGGCGGTTAATATTTGGGAGGGAGAATTTAGTGGGGGGTGAAAGT TTGTCGGCGTAGGTAAAATTATGCGGCGGGTCATATTATGGGGGGGAAGA AAACAGGCGCAGGGAAGATTATGCGGGCGTGGAAATTTAGTGGGGGGG TGAAATATTTTGGGAGGAAGAATATGTGTGGCGTGGAGATAATTTCGGG GCGGGGCGAAAAGTTGGCCGGGGGAGAAATATTATGGGGGTGAGATATAG ATATCGGTGGGAAAATATAATGGGGGGGGAGAACACATATGGCGGACGA GCGCAAGAAGATCGGCGGCGTATGGTAATAATAATGGTGCGGAGAGAATA TCATGGTGAGGGGGAGAAATATACGGGGGGGGGGGCAATTTTGATGGGG

>Sequence 102

AGGTACATACTTTCCTGTGTCTTGCTGTTTTCACTTACTATATCTTGGAG
CTATTTCTATATTGCCACATTCAAAGCTTTTTAAAGCATTTTCAGGATAG
CTATTTATAGTCAAGATGTATCACAGTTTGTCTTATTTACCTGTCCCCCC
ACTGATGAACAGTCTGGTTGCTTCTGTTTGTTTTTTTCTGTTATTGTAAT
AAACATCCTTATAGTTGCACTTTTTTATTGTTAAATCTTGATGTATTCTT
AATCTTTTTGTTTTAATAAACACAAGGTCTCACTGTGTGGCCCAGGCTGGT
CTTGAACTCCTGAGCTCAAGTGATCCTCCTGCCTCAGCCTCCCAAAGTGC
TAGGATTACGGACGTGAGCAACCACCACTGGTCAATAGTTGCACTTTCTA
ATGTGGGTTTGTAGGACAGTTCTTCAGTANTGTACGGCATGAAGGTTTAT
AGTTAGGTAAAATGGCGCTAGATTGAACCTGCCCGGGCGCGCCGTT
>Sequence 103

>Sequence 104

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## Table 4

>Sequence 105

>Sequence 106

>Sequence 107

>Sequence 108

AGGTACATTTTACTTGCTTGATCTCTGATTCCCCTCACTGGGTCACCCGC
ACCTCTGAGTGCCCTCACCCTGCATGAGTCTTGACACCAGGCCCTGA
GCCTTTCCTCTGTGTGGTTGCCTCACAGTCCTCTGTGTGGGATCCAGAAC
TAGGCACCAAGCTCCCCACGTAGGAGGGTGCCCTCCCCATTCCCTCTGCT
GAGGCTCGAACCAGCATG

>Sequence 110

> Page 21 of 990 of Table 4

#### Table 4

CACTTTGGGAGGCCAAGGTGGGGGCGG

>Sequence 112

GTTCCTTGTGTCTTAAAGCAAACACAGGCACAGTATTCTGGGCAAACCAG ATGTTAATAGCTTGACCTCTCTGTCAAAGGAGGACTTGGTTGCTTAAGAC CCTTAAAGCTGTCAAAGTTATAGCTTCTCAGGATACTATCATCCTCACCC ATTTCTTATTCTCTTTGCAGGGAGAGATCATCTCTCAAAAAGCTCCCATC AGAGCAACCATTCTGGGACTTTGAGCAGAATGCTTAAGGCAGTGGTTCTA AAATTCCACACCACCTGTTCTTCCAGTTGTGTCCTCTCTGAGCTGCCTCT GACGGTCACATTCCATGGCCATGTGCCACAGCAGACTTGTGATACTGATT AGGGGAGAGAAGAAAATGGGAGTGGGGGTCATTCATNCCTCTCTCT ATCTAGAACTGTGGAACCCCCGGCATCCTGGAATTTCATTTCAAACTATT AATGCCGCCACTCTCCAAGGGGGGGCCCGGACTCCAGCTTTTGTATCCTT TTAATCGAGGATAAATAGCCCGCCTCTCCGAAATCCAGGCCATTACCATT CTCCTCGGTAAAATTGGTTATCCGGTACAGAATCTCCAACACCTTTAAGC GCGAGCGTGTAAATGAGTAAGACCTGAGGTGCCTTATTCAATAGGCGAAC TCGCATTAATGTCATGTGGCAAACGTGATAATITATCCTCTCGAACT >Sequence 113

GATGATCGACTCCTATACGGCGAACTGTGCGCCTGATATAGGCACGCTAC CGCGGTGGCGGCCGAGGTACTTGGTGAAGTGAGATTCAGACTGAGTGGGG TCACAGCACAGGCACTGTCTTGCCTGGCTTTATCTGAGCCAGTCACACC TCTCCTGGCCACTATCTGTGGTCTAGCCCCCTTTGTGCAGAAAGAGAAAG AAGAGCCTTGAGGACCAGCCTAGTCAGCCGGGGGCCATTGAGACTGCCAT GGAAGACTTGAAAGGTCACGTAGCTGAGACTTCTGGAGAGACCATTCAAG GCTTCTGGCTCTTGACAAAGATAGACCACTGGAACAATGAGAAGGAGAGA ATTCTACTGGTCACAGACAAGACTCTCTTGATCTGCAAATACGACTTCAT CATGCTGAGTTGTGCAGCTGCAGCGGATTCCTCTGAGCGCTGTCTATC GCATCTGCCTGGGCAAGTTCACCTTCCCTGGGATGTCCCTGGACAAGAGA CAAGGAGAAGGCCTTAGGATCTACTGGGGGAGTCCGGAGGAGCAGTCTCT TCTGTCCCGCTGGAACCCATGGTCCACTTGAAGTCCTTATGCTACTTTCA CTGAGCATCCTATGAAATACACCCATGAGAAAATCCTTGGAAATTGCAAG TGGGCTGGGGTCATGTCTTAACTTGTCCCACCTATCCAGATTGCCCACAA GAATTCAATGGGTCCGGAAAAGAAAGAAACTGATGGTGTTAACTGAACCC ATTTTGATTGAACCTACCAGGGCCTGATGTATTCATTGGAAACCGAACAA ATTGGCTTTTCCCTTGCCGGGGAATATTGGTTTTGAAAGGCTTTTGGTAC CTGCCGGCCGCCGTTTTAAAACTG

>Sequence 114

>Sequence 115

CCGCGATTGCGCGCGAAATGAATACTCTAGGGCGAATGATGTCACCGGTT GGCGGCCGAGGTACTTCCATGATTATTCAAAGAAAAACAATTTTTTCCAT TTGTCTAATGAGATGACCACCAGTGGTGTGAACTACCTTCTGCCCCCATC CGCAGTCCCAGGATCCTGGGACAGGGCTTATGAACACCACTGTAGTC

> Page 22 of 990 of Table 4

## Table 4

AGCTCACTTGATCCACAGCCTGGCACCCCCACTGTCTGGCTAGGGAGCCT CGAATGGGTCCCAAGGCCACCCTGCTCCTCAGTTACATCATCTGCATAGT AGTGGTGGTTGTGAGGAATTCAGGAGCTGCAGCATAAGGGCTCGGCAGGT CCTAAGTGCACAGTAAATGCCAGTGATTCTTAAGAGTCTGAGCTCCCATT GTAGAGGCAAGTAAGCTGAGGTTCAGAGACAGAAAATGACTTGCCCAAGA TCACCCAGCTGGGAAGTGACAGTGCCAGGGTTGGAGCCCTGGTTGAGCTG GTTCCACAGGCCAGAGCTCAATCTGCCCTTTCTCTGGAAGAACCTCCCAC CTGTCCCCATGCCTTTGGTTCTTCCTTAACCCAAATTCCCGGCTGCCTTC TAGGGATAAGTGGGAGCCCACTGGAGAAGCCAGCCCCTAGAAGGAGAAA AACAGGAGGAGGGGAAATTCTAACAGGACACAAGCTTGGAATCGGACAA AAAACTTGGGGGCCATACTGGTCCCCCCAACCCCACCTGGTTGACCTTGA CTGGGCGGTCGGTTATAAAGA

>Sequence 116

GGTACTACAAAGCATATCTGAAAGGAAAGATTGAGCGCACCAACTATTTG CAGAAACGAGCTGCAGCCATTCAACTACAAGCTGCTTTTAGGAGACTGAA AGCTCATAATTTATGTAGACAAATTAGAGCTGCTTGTGTTATTCAGTCAT ACTGGAGAATGAGACAAGACAGAGTTCGATTTTTAAACCTTAAGAAGACT ATTATCAAATTTCAGGCACATGTAAGAAAACATCAACAACGACAGAAATA TAAGAAGATGAAGAAAGCAGCTGTTATAATTCAGACTCATTTCCGAGCTT ATATTTTTGCCATGAAAGTTCTAGCATCTTACCAGAAAACACGCTCTGCT **GTCATTGTGCTGCAGTCTGCATATAGAGGGATGCAAGCCAGGAAAATGTA** TATTCACATCCTCACATCTGTTATAAAGATTCAATCATATTATCGTGCTT ATGTTTCTAAAAAGGGAATTNTTGAGCCTAAAAAATGCTACAATTAAATG GCAGTCAACTGTTAAGATGAAACAAACACGTAAAACATATTTGGATTTAA GAACCGCTGCACTATTATCCAGCAATTGTACCGGTCCAAAAAATAGCTGG CCAAAAGAGAGAGTATATTCCGATGCGGAAATTTGGTTTAACCTGGAA CAATTGGGTTAAGGATACCCTGGCCAAAGCAAATAGGTTCCAAGAAAAGC TGTATTTCACTCCAAGCTTATTTAAATGAGAAGGTTCGGCGGATTATTGA **AATGTN** 

>Sequence 117

CCGGGCAGGTACTTTGCTACACGGTCGGGGGCCATTGAGACTGCCATGGA AGACTTGAAAGGTCACGTAGCTGAGACTTCTGGAGAGACCATTCAAGGCT TCTGGCTCTTGACAAAGATAGACCACTGGAACAATGAGAAGGAGAGAATT CTACTGGTCACAGACAAGACTCTCTTGATCTGCAAATACGACTTCATCAT GCTGAGTTGTGCAGCTGCAGCGGATTCCTCTGAGCGCTGTCTATCGCA TCTGCCTGGGCAAGTTCACCTTCCCTGGGATGTCCCTGGACAAGAGACAA GGAGAAGGCCTTAGGATCTACTGGGGGAGTCCGGAGGAGCAGTCTCTTCT GTCCCGCTGGAACCCATGGTCCACTGAAGTTCCTTATGCTACTTTCACTG AGCATCCTATGAAATACACCAGTGAGAAATTCCTTGAAATTTGCAAGGTA GGAGGCATCTTGGGTATTACTCTCAGATTAGCTTTGTTGCTGGAGCTATG TGCTTCTAAGGACGTGTACCT

CCGGGCAGGTACGCGGGAGAGCGGGTAAAGTGGACTGGGGAGAACTTCG GAGGATGTTCATGTCCAGGAGCAGCCCCACGCCCTGTATGGTCGGTGTCT AGAGCCTCACAGCAACTAAGACCAACCCAGCTCTCAGAAGAAGGAATGTC AAAATGTCATGTTCAATTTTACATTCAGTGCCTGGAATCTTTTCTTCACA ATTGAAATGAAATGTGCTGAAGGAGGTGAATCCATGCATTAATCTTCAGC TCACAAAGGAAATACTACATAAGAAGCAAGACCACAGACTCAAGACGGAC ATAATTGGATTTTTTTTGCCATGGCCTGGAAAGAAAGGTACCT

>Sequence 119

CCGGGCAGGTACTTTTAGAAGAGACAGGGTTTCACCATGGTGGCCAGGCT GGTCTCGATGTCTTGACCTCGTGATCTGCCTGCCTCGGCCTCCCAAAGTG CTGGGATTACAGGTGTGAGCCACCACACCCGGCCTGAATTGCACTTTTGA TGGCTGAGCCAAATGCTCATTCTATTTAATATTGCACAGCCTGAACCAAA ACCCGTAACATTATAAAGGAAGAGATGAGAGCCATTTCAAACTGTGAGAG AAGGGAAGACATCAAGCAAAATCTGGGGGTTTTAGCCAACAGACTTCAGT

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CCGGGCAGGTACACCACTAGCTGATAAGACACTGTTGCCCATAATGTCTAT
TTATTGGATCAGCAATTTATAAGTCCCACATTCTCATGCCACATAGCTCT
ACACAGCTGCAAAAATATACCATAGCTTGCAGGTGATCATTGGTTTGATA
AAAGATATTGAGTCGCTCATCTTGTGAAAGTGATCTTTGATATAAGAGGA
GCATCAGCGGGGAAGCTCACATGTCCCGTGGCTCACACACCAGAAGGTAT
TTGTGTCTTGTCATTGTCTGTCTGGCAGTCCATGGCAATGGCTTTTTCAG
AGAGGCCTGTTTTTGTGGTTAACTGTGTGTACCT

>Sequence 121

CCAAGAGCCTGTAATAAAGGCTCTCAGCATAAATGGTCTACTATCTAACA CCACCAGAACCCTTTTGGCATCTTTTGCATCTGGATACTTTTGCTCTATG CATGAGTGGGATGTATGGTCATTCCTTTTATGCAATCATGTAGTAGGCAA AACAATGGCTCCCTCAAAGATGTCCACATCTTAATCCCAAGAATCTGTGA TTATGTTAGTTTATATTGCAAAGGAGAATTAAGGCTGCAGATTGAATTAA GGTTGCTAATCAGCTTGCTTTTAAATATGGAGAGCATCCTGGATTATCTG TGGGAGCCCAGTGTAATCATGAGGCTACTTAAAAGTGAAAGCGGAAGACA GAAGAAGAGTCAAGAGTGAAATGTGACCCCGGAAGAACTTTCAAAGGCGC AATGTTGCTGGCCCTGAAGATGGAGGAAGGGCTGCTGTACCAAATAAGGT AGGTGGCCCTCGGAAGAAGGAAAGAGGATTCACCCCAAGAACTTTCTAGA AGGGAAAGCAACCCTGGCCACACTTTTGATTTTAACCCAGTGGGACCCTA ATAGGACTGGTACAGAAATCTAAGAATAGTAATTGTGTATGTGAAATGTT TGTGTGTGTTTTCCCCCCCCCCCCCCCTTTCTATGTGTTTAAACCACTAT AAGCCATGTTATTTTTTTGGCGCGGATTTAAAAACCGGTTCCAATAAAC ATCCCCTGTTTTCCAATAAAAAATAATAACTGGGGGCCAAGGCCCGTAAA AAG

>Sequence 122

>Sequence 123

> Page 24 of 990 of Table 4

GGAAGAATGGCTCCTAAAGCGGGTGATCATCTGCCCTCACGACTTACAGT GCCTCAGCATCACATGCTATTCATTNTGCACAGCANAACCAGGAAGTGAA TATGACTGTTATCCCTACTTCACAAGTAGAGGACACTGAGGCCCTGAGAG GTTAAAAGTGCAGGTAAGATTTGACCTACGGGCTGTGTGCGGGG >Sequence 124

AGGTACTTGGTGAAGTGAGATTCAGACTGAGTGGGGTCACAGCACAGGGC ACTGTCTTGCCTGGCCTTTATCTGAGCCAGTCACACCTCTCCTGGCCACTA TCTGTGGTCTAGCCCCCTTTGTGCAGAAAGAGAAGAAGAAGAGCCTTGAGGA CCAGCCTAGTCAGCCGGGGGCCATTGAGACTGCCATGGAAGACTTGAAAG GTCACGTAGCTGAGACTTCTGGAGAGACCATTCAAGGCTTCTGGCTCTTG ACAAAGATAGACCACTGGAACAATGAGAAGGAGAGAATTCTACTGGTCAC AGACAAGACTCTCTTGATCTGCAAATACGACTTCATCATGCTGAGTTGTG TGCAGCTGCAGCGGATTCCTCTGAGCGCTGTCTATCGCATCTGCCTGGGC AAGTTCACCTTCCCTGGGATGTCCCTGGACAAGAGACAAGGAGAAGGCCT TAAGATCTACTGGGGGAGTCCGGAGGAGCAGTCTCTTCTGTCCCGCTGGA ACCCATGGTCCACTGAAGGTTCCTATGCTACTTTCACTGAGCATTCTATG AAATACACCAGTGAGAAATTTCTTGAAAATTGGCAGTTGTCTGGGGTCAT GTCTAAACTTGGTCCAACTTTTCAGAATGGCCACAAAAATTCAACTGGAT GACCCTCCCCAGGGCTGATGTGATTCATTGGGAAACGCAACAAACTTGG TTATTCCCTGGCCGTGGGAAGATTGGGTTTTTAGAGATCTATTGGTCCG >Sequence 125

CGGGCAGGTACCTCTGTGTGGCAGGCGATCAATGGTGTTTCTATCTCAGC CAGGGACTCAGGTGCGAGACTGAGAAGCCCAGGAGGCAAGAGGCACCTGC AGCTCTAGAGCCCACTGCAGATTTTCTTGAGGGCCGTATATCCAGAACCA TCCCAGGGCTTGGCTTTTGAGAGAAAATGTAGTCTTAAAGAATGAACAAG TGGGCCGGGCGCGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGTC ACGAGGTCAGAAGATGGAGACCATCCTGGCCAACACAGTGAAGCCCCGTC TCTACTAAAAAAAAAAAAAAAAAAAAAAAGTACCT

AGGTACTCACTGAGATTCTAGTGAGCATATCTACATTAAGCTGGGGTGCA CATTCTTTAGATATACCTGGTATGCCATATACCTGTATACAAGCTGCCA GCAGACACCGATGGCGAAGAGCCTCATAGCAGATGTGGCAGTGGCCGTCA CTTCCCATGACCCGCGTACCTGCCCG

AGGTACAGTGAGGGTGTTCAGAGGGGAGGCACAAAGAATAGCTCTGAGATT AGGCAATGGAAATGACAAAAAGAGATGAATAAATCCGATTTGAATACCA ACAATTTGCTCTTCAAACCTCCTGTAGAGAGCCATATACAAAAGAATAAG AAAATTCTTAAATCTGCAAAAGATTTGCCTCCTGATGCACTTATCATTGA ATACAGAGGGAAGTTTATGCTGAGAGAACAGTTTGAAGCAAATGGGTATT TCTTTAAAAGACCATACCCTTTTGTGTTATTCTACTCTAAATTTCATGG >Sequence 128

ACTACTCTGCACATGATAGGGTGTTCATCTCTGGTCTTCACCTATCAGGT GCTGACAGCACCACACCCCAACACCGCATTGTCAACAGACACTACCA AATGTTATCAGGGGAGGAGGAGTGATTCACCCCTCTTAAGGAACCACTGAA AATGATTTTAAAAATACCTATTATTTTCATCTTTAAGGAATAATTATTGG CCAGGCTCAATGCCACATGCCTGTAATCCCAGCACTTTGGGAGGCTGAGG TGAAACCTCGTATGTACCT

>Sequence 129

TGTAAGAAGTTTCCATATAAAGGGCTGTAGTATGGGGAGGTAATGTGCAG GCTGGTTTGCGGCTGTAGGGGCCACCTTGCTGCAGCTCTCCACTGATATG **GTACCT** 

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>Sequence 130

AGGTACACAGAGTTCCCACATAACCCCCTCCAACAGCCTCTATCAACATC
CTGCACCACTGTGGTAAACCGTTACAACAGATGAACCTACATGGACAGTC
CACAGTTTACCTTAGGGTTCACTTTGTGGTGTTATACAGTCTATGGGTTT
GTATAAACAGATAATGACAGGTTTCCATGATTACAGTATCATACAGAATA
GATTCACTGCCCTAAAAAATCTGTATGCTTCAAGAGGCCGAGACGGGAGA
ATCGCTTGAGCCCAGGAGTTCAAGACCGGCCTGGGCAACATAACGAGACC
CC

>Sequence 131

>Sequence 132

>Sequence 133

>Sequence 134

>Sequence 135

CCGGGCAGGTACTCGGGACACTTCAGAGGTGAGCCCAGAGCGGGTAAAG TGGACTGGGGAGAACTTCGGAGGATGTTCATGTCCAGGAGCAGCCCCACG CCCTGTATGGTCGGTGTCTAGAGCCTCACAGCAACTAAGACCAACCCAGC TCTCAGAAGAAGGAATGTCAAAATGTCATGTTCAATTTTACATTCAGTGC

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## Table 4

CTGGAATCTTTTCTTCACAATTGAAATGAAATGTGCTGAAGGAGGTGAAT CCATGCATTAATCTTCAGCTCACAAAGGAAATACTACATAAGAAGCAAGA CCACAGACTCAAGACGGACATAATTGGATTTTTTTTTGCCATGGCCTGGAA AGAAAGGTACCT

>Sequence 136

CCGGGCAGGTACGCCTGTAGTCCCAGCTACTCTGGAGGCTAAGGCAGGAG AATCGCTTGAATCCGGGAGGTGGAGGTCGCAGTGAGCCGAGATCGGGCCA CTGCACTCCAGCCTGGGAGACAGAGCGAGACTCTGTCTCANGAAAAAAA AAGGAAAAAGAAAAAAATTGGGGGGGAATTTTTTTTTACCAAAACAATT AAGGGCATATCCAACTTTAAAGTTTTTATAGGGTATCACTTTTATAGAAA TTTTTTTGAAAAGCCCCACATGTTAAACCTAATGATCTAAAATCTTATTC TGATCAAACCACTTTTTAATAAGTGAGGAAACTTAAACCCCCATTGGATT AGACTAAAAAATTACCAAATTAATTGAGGAACCTAGGGCTTATAAAGAGG GTTATTTGTAGATCACAAAGTGGCAAACCCAAAACTGAAGTTCAGGCCTC CTGACTTTAATCTAGGGCTCTTTCTTGCATCATTAAGCCTCTGCTATGAG GAACATTTTTAACATGTCCTTTAATACCATGTGGCTATAAAACATAATTT TATTTGGAATTTGCCGGACCTAAAACCTNNTTNCCTTTTTTTTGGG AGCCCCCGGGCCTTTAAAAAAATGGGGAACCCCCGGGCCGGGGATTTT TTTTCAAATTTTTTCCCCCCCCCCCCCGGGGGGGGGGGCCCACC TTTGGTCCCTTAAAGAGGGTAAAACGCCCCCCG

>Sequence 137

>Sequence 138

AGGTACTTTTTTTTTTTTTTTCCCAGAAAAGGTTTCCAATAGAGATT GGAATGGTTTTCCAATAGAGATCTTCTTGGGTCCAATGATGATGTAATAC TAATGCTTGTTAATATACTTTACAAAATTGCTCTCTAAAGCTCTTGTTTC TATCTGAAATACCCAATTAATGACAGTTTGAACTGTAAATAACCTCTACA AGGTATACAAACTATTGACTGTTAATATACTTTATAAAATTGCTCTCTAA AACTCGTTTCTATCTGAAACATCCACCAATTAATGATAGTTTGATCTACA GTTTGTTTTGGAGATGGAGTCTTGCTCTGTTGTCCAGGCTAGAGTGCAGT GGCATGATCATGGCTCACTGCAACCTCTGCACTCCAGCCTGGGTGACAGA GTGAGACCCTGTCTCAAGAAAAACAAAACCCAAAAATCTAGACAGCAAAA CTCATAAACAAAAAGTCCAAGTATTATTGTTGACTCAATGGAACAGCCT TAAGGCTATAACTTTCTATTGGCTAAACACTGTTTACACACCGCTTAATT CAATTTTAAAACTGTTTATCAGAAGCCTCTTAGAATGCAATGGTTTTTTC CTAACCCATTCACTTTTCTGGTTTACTTCTTTGGATGAGGTATCCTTTG AGGGTTAGGTACCTGCCCGGGCGGCCGTTTTAAACTAATGGATCCCCCGG CCTGTAGGAATCCATATTAACCTATGAATCCC

>Sequence 139

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#### Table 4

TCCTTAGGAAATATCAACTCTTCCACCTTTATTGGGAACTCTAGCATCTC TACTGTAGTCTTTTCTACTCCCCAACTCATACCATAATCAGGGGCATCCT CGACGTACCT

>Sequence 140

AGGTACTGTAACTGAAGAATTAAAGGCAAAAATTTAAGACTGGAATCAAT GGAGAATAGAAAAGTTTTAGCTGGCAAGTGAATATGCTTCAGATAAATC AACTAAGATAGACTGAAATAAGCCAGGGGTAAGAGTAGTTCTTACTAGAA TAGAAATGCCAGCCGGGCGCCGCGGCTCACGCCTGTAATCCCAGCACITT GGGAAGCCAAGGCGGTGGATCACGAGGTCAGGAGATTGAGACCACGGTG AAACCCCGTCTCTACTAAAAATACAAAAATTAGCCGGGCATTGGTGGTG GGCGCCTGTAGTCCCAGCTACTCGGGAGGCGGAGGCAGGAGAATGGTGTG AACCTGGGAGGCGGAGCTTGCAGTGAGCCGAGATTGTGCCACTGCACTCC TTTAAAAAAATTTTTTGCCGGGGGGGGCTTTTAAAAAATAGGGGTCCC CCGGGGGGGGAGGAATTTAATTAAAGTTTTTTGCCCCCCGCCCCTCCGGG GGGGGCCCGGCCCCACATTTGGGCCCCTTTTGGGGGGGGAATTTGGGC ANAANANAAATGGTGNATGTAATNNGTGTAAGATGTGTGATGTAGGTTTG CGTGGTTATATGTGAGATGTGTGATATGAGAGAGGACGGCTGTGGTGTGA GTCGCGTGTTGTTGGGGGAGTTGAGCGTGTTATGAGAGGAGATGCC >Sequence 141

AGGTACAAGTIGTCTTTATGCTGCGAGATAAGTCCTCTCTTGGTTTGAGC
TCCCACCTTTTCAGTGAACTCTTACATTTTGGGGGGATCTGCTCTTGTAAA
GGACATCCTTTCTGGTGAGTATTCTTTTTGGTTTAATACTTGGTTTGGTTA
TTTGTGCATGACTCTAATCTCATTCCGAAACAAGTTAAGTTGAATAGACC
AACTAGTGAATTAATCCGTCTCCAAAATATATGTTTTTGGCATTAACCTG
TTTATTTTGAAACTCTTTGTAAGAAATGTAAACCTGTAATGATGATCTCT
GCTTTGTAAGGATATCTGCCTCTCTGACACCTAAAACACTAGATGCTTTC
ACAAAGCAAAAGGGAGAGACCTAAATCTATCTATCTGTGTAAACTCACCC
TTGACCATTTCATTCTGAAGGCTTCCTATATATATGCTTTTTTTCATCTCAA
CGAATACTGGTGTATAAGTTATGTACCTAC

>Sequence 142

>Sequence 143

>Sequence 144

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## Table 4

>Sequence 145

>Sequence 146

>Sequence 147

>Sequence 148

AGGTACTTTACTCACCCTTCCTCTGACAGAAAAGGATGAAGTCAAGGGCC TGGTAGAGGCACCACTAAGAAAGGCATCTGAAAGGACCAAAGAGAGTGAC CAGCAAGCATTTTTTACAAGGCTGAGGAGCTGACAGCTTCCATGAAAGGC TGGACCACCCAGTGGTGAAAAGCATCATCTGGGTTACCTTGTGCTGCCAT AAAACACACCACAGACTTGGTGACTTAAACCACAGATATTTATCTTCTCA CAATCCTGGAGGCTGGAAGTCTGCAATCACGGTGCCAGCATGGTCAGGTT

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>Sequence 149

CCGGGCAGGTACGCGGAGAGACTGATTGGCGTCACAGCACAGGGCACTGT CTTGCCTGGCTTTATCTGAGCCAATCACACCTGTCCTGGCCACTATCTGT GGTCTAGCCCCCTTTGTGCATAAAGAGAAAGAAGAGCCTAGAGGACCAGC CTAGTCAGGCTGAAGAAATGTCAACAATTGGGAGTCTTGAAGGATTCCAG GCTGTGTCTCTGAAGCAAGAGGGGAGATGACCAACCCTCTGAGACTGACCA CCTATCGATGGAGGAAGAGGACCCGATGCCAAGACAGATTTCAAGGCAGT CAAGTGTGACCGAATCAACTCTTTACCCCAATCCTTATCATCAGCCTTAT ATCTCACGGAAGTACTTTGCTACA

>Sequence 150

>Sequence 151

>Sequence 152

AGGTACCACCACCTATCCACACTCTCACACAATCACCCCTTTTGAAGTAA
AGCCTATATTTTAAAAATAACCATTACAGATTGTGAGTGCAGTCTAGGAT
CACATAGCAGAACTAAAAGCTAACTGGCCCACCCACAAAGTAAATGTGAG
ACAGAGGGCTCGGGGTAGCCATACTCTAGCCAAGTAGTACCTGCCCG
>Sequence 153

AGGTACTTTTGGAGTATAAGAGAGTCAGTGTTTCTAAAACAGTTGTTCT
TAGAGAATAATAATGATATCTACCATTACTGAAAGATATTTTATTTCACC
CTAACCATAACTATATGAGGTAGGTGTTGGGTTCTCTAGAGGACCAAATA
AGTGACAACCTCATTTTCTACCTGAGATCTGAATCCATGGAAATCTTTTT
TAAAAGATTAAAAGATTGAGAGATTAAAAGACTGCTTTATAAATGATGTT
AAAAGAATGTAGCTTTTTATTTGTTGGCAAATGCACTTCCTAACCCTGAA
CTTCCCCTCCCAGTCACAGACAATGTTGGGCCAAGGTAGACCTCCTTCAC

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#### Table 4

>Sequence 154

>Sequence 156

ATGTACCAGGCTAGCCTTCCTGATGACTGCAGCAGCAAGGCTGCCCATGG GCCACCCCAGACAGCCTGCTTAGAATCTCTAGAAGAGCTGCTTGATGTAA GACATTAAGACATTCTTAAACGAAGCCAGTCTTCAAGGACTAGAATAAAT CCTTAATTCTTCCAATACATAGACATTAACGTAAAGCAACAAGAAACAAG GAAAGTCAAATAGACATAGCACTCCCCAAAGCATATAATAATCTCTAAGT TGATCCAAAGATACAAACTGCCTGACAAATAATTCAAAATAGCTCATTAA AAAATGCTCACTAAACTTCCATAGGATACAGGGAAACAATTCAATGGAAT CAGGAAAACAATAAATTACCAAAAAGAGATATTTACCAAAATTACCAAAAT TTTAAAACAAACAACAACAACAACAACAAAAAATCAAACAGAATTTC TGGGGCAGAAAAATAGAGGGAACGAAATAAAAACCACCAGAGAAAATATC AAGTACAGAATTGATCAAGTAGAAAAAAGATTTATACATGAATTTGAAAG TAAAAGGGATAAAGAAAATTTATTTTTAGAAATTTTTTAGGACTTTTGGAA AAATTTTCAAAGGACAATTTTAAGTNGTAAGAATTCAAGAAGGAGAGAAG AAACAAAGGGTTGAAAGCTTTCCAACCTTATTTAAAGAAGCATTGCCATC CTTCTTTCA

>Sequence 157

AGGTACAGAAGGCTGAGGCTTCTGTCTGAGTTGACCGTGACCTGTGGTT ACAGCATTTTAGGACTTCGTAACAGAATGATCCACAGAGGTCAGCAGGCC CTTGAAAGAACGCTGAAGGAAACTTGCATACAAACAGTCTCAAGGAGGCA AACACATGCTTCAGCGCTGCCCGCGTACCTGCCCG

>Sequence 158

AGGTACACCTGTAATGGCTACCCCGCTGGCTCAGAGCTCTGCCTCACCGC

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#### Table 4

>Sequence 159

CCGGGCAGGTACTTGGTGAAGTGAGATTCAGACTGAGTGGGGTCACAGCA CAGGGCACTGTCTTGCCTGGCTTTATCTGAGCCAGTCACACCTCTCCTGG CCACTATCTGTGGTCTAGCCCCCTTTGTGCGAAAGAGAAGAAGAAGACCTT GAGGACCAGCCTAGTCAGGCTGAAGAAATGTCAACAATTGGGAGTTTTGA AGGATTCCAGGCTGTGTCTCTGAAGCAAGAGGGAGATGACCAACCCTCTG AGACTGACCACCTATCGATGGAGGAAGAAGACCTGATGCCAAGACAGATT TCAAGGCAGTCAGGTGTGACCGAATCAACTCTTTACCCCAATCCTTATCA TCGGCCTTATATCTCACGGAAGTACCTCGGCCGCCCGGGCAGGTACCAGC GCCATGCTGTTTAAGTATCAGAGGCTTCATAGTATGTTTTAATATTGGCT AAGACTAGGCCCTGCTTAGAACTCTTCTTTCGCTGTGTTTTCCTAACTAT TGCGTGTGGTATTTTCCATAAGAACTTTAACGTCAACTTTATCTGGTCCA TCCAAAAGCATATGTGGGTGGTTTTTAGGTGACCAATTAAGCCTATCAAT CACACTCAGGAGAACTGACCTCTTTATGCAGTGAAGCTTTTTCCTTCGAG GGTGTGGCTAGACCGGGAAGCCCCCAAAAGTACCGTGGGGGCCATATGCC AACCCAGGGTGGCATTGGCCAAGAACGAGGGCCGGGAAGAAATAAACCCT GGTTATAATAGCAAGCCCTCTCTTTGTCCTCCCAAAAAGCAACTGTCCTT GATTATGCACCGGGTGGTATGGTTCAACAAC

>Sequence 160

>Sequence 161

AGGTACATTTGGCTGATACTGCAAAAATGACGGTCCCTGGGTTAACGGGA GGCATGTCTGGCTGCTAGGTCATCCGAGAGGCAGATTGGGGCAGGTTTCT AGGAAGTATAGGCTCGCCTTGCGGAGGACCAGGTTGGCACAGTTTGACTG CTGTGCACTAAGGCAGGGCACAGAGCTGATGCCCTCAAGGTCAATTCCAG CCACATTTCTCTGTGATTCTATGACTCAAAAGCTTGGAAACAACCTCAAA GGATTAAATAAATGGGGGAACAAAGTATTTGCTCTCTCTATTAAGCCTT GGCTGGGAGTCTTTCTTCCACACTCCTCACATGCAAAATGCTGTTTGTGG GAGCAGATTAACATTTCAAACCACTTCCTGCAATTAGACGGGAACACCTG GTTTTGCAATAACTCTCATTTTCTGTGTGTGCTGAAAGGTTTTTGAAATT CCCATGCTCAGTGGATTACCCTTATGGCTTGTCACCAGCTGATACGTTGG CATTGTGCACAACAATTTATTGCAGCTTCCCACCAGCCTTTGGCAGAAGG CCCCACAAAAATAAGTAGCAGGTTAATGCTGACACCTTCACTTTCTTCCG TCACATGGGGCCCGGAATCCTTTTAGTGAAAAGTGGTTCAAGCTTAGGGG GAGAGTTGTAGGAGCTTGAGACCATGTAGGGCAGCAAAAAGAAACCTTTT TGGCCTCAAAATCTGGGTGATTAAATAAAACCCAAGTTCTGCCAAGGGGC ATTTGAGGTATGGAGTTGAGAGATATTTCTTGGTAACC

>Sequence 162

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### Table 4

>Sequence 163

>Sequence 164

AGGTACGCGGGTATGTCTCGAGAAAAAAGCCAATACAGTCTCTTTTGAGG ACCTTGAAAACTAACCTGCTAGGGATATCATACTAGGCCTCTGGGTGCCG CTGTCCGCCAATCCGTGGCTGGAGGGAAACAAAGCAATCCACTGACGCAG CAGTCCCCGCAGGCTTTTGAGACACACATTAGGAGAGGACTCTGCCCGCT GTCTGTCTCACAATCTGCTCGAAATATCTTGGTCAGGAATCTCAGGATGT CTAGTGACCCCGAGTGAGGTGCTGCCTTTTATTCCTGAGCATCTTTGGAA GCAGGAAGCAGGAGCAACGGTAGCGAGAGGTATTCGGATCTGAGTATCA GCGCANGAAGCGCTGTTTCCCTGCCTGAGATCTTTATTCTACTAGGTCTT TATTCTACGTAGCCGATACGCTGTAAAATTCTGGAAGAGAAAGCTAGGGG TTTAAGGTTGGTAATCTCTCAAAAGATCTGCGTCTTGGTGACGGAAAGAA AACCCAGCTTGAGAATGAACGGATAGATCTAGCAATTATTCCCCAAGGAA GACCCTTCGCCCTTTAAATTGAAGGCACTGAAAAACGTATAAATGTTTTC ATATAAACGTATGCATTTTGATATAAATAACAAAATGGCTTTTAACACCA >Sequence 165

AGGTACACACAGTTAACCACAAAACAGGCCTCTCTGAAAAAGCCATTGCC
ATGGACTGCCAGACAGACAATGACAAGACACAATACCTTCTGGTGTGTG
AGCCACGGGACATGTGAGCTTCCCCGCTGATGCCCTCTTATATCAAAGAT
CACTTTCACAAGATGAGCGACTCAATATCTTTTATCAAACCAATGATCAC
CTGCAAGCTATGGTATATTTTTTGCAGCTGTGTAGAGCTATGTGGCATGAG
AATGTGGGA

>Sequence 166

>Sequence 167

CCGGGCAGGTACTCTTAAAATACCCCCTTAAAAAAGCTAAAACACCACTT

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### Table 4

>Sequence 168

GCCTGGAGAAGCCGGCTTAGCATATATGGGAGGCTCTTCCGCATTCCTAT GTTCAATTTGCCTAGATGTGGCTAGGTAGTTTCGGCATGCTGGCATGACG GTATTAGTGTTATTCAAAAGGCGTGAGGACGGTGTTTCCAACAAATATCG GGGATTAACCCATGAAAGGAACAATTTTGCCAAAAAGGCCGGTGAAAATGG CTGGAAACCGGTATAAAAGCCCCGTAATTGGCGGTTTTTTCTGTGGGTCA CGCCCCCTGTGCGTGCATATCAAATAACGATACTTCTAGTGTAAAAGTGG TGAATACCCTCCCGAACCTTTAAAGAGACCCGTCGTGTTCACCTTATGAG AAATGCTGTGGGACGCATTTCT

>Sequence 169

CCGGGCAGGTACTTAGGACTATGGAGAAACAATGGAAGACATTAATTCTG CTTGTCTTGATGGTAAGGGTGGGGATGAAAATACAGATCGAATTTGGGGG AGCATGTTAAGGTTAGGGGAATAGAGATAGCTTATATTTAGAACAAGTTA GTAGAGACTGTATGATTTTCCAAATAGAGAAGGGTAAAAAGACATTCCAT AGAGGAAGAAATTACATGCAAAACCACAGAGACCTTAGTTTATAAAGAG TAACTGGGTATGGCCGGGTGCGTTGCCTTACGCCTGTAATCCCGGCACTT TGAGAGGCTGAGGAGGTTGATCATGAGGTCAGGAGATCGAGACTATCCT GGCTTACACGGTGAAACCCGTTTTTACTAAAAATTACAAAAATTACCTGG GTGTGGTGGAATCCTGCAATCCCAACTACTTGGGAAGCTTGAGCATG AAGATTGGTGTGAACCCTGGAGGAGGATCTTTGAATTGAGCCCAAATCAT GCCATTGTATTCCAATCCTAATGACAGGAGCTATACTTCATTTTTTGAAA AATAGAGAGGATAAGGGCCCTCTGTCGTTTATAACTAAAGGATTCCCAGG CCTGAGGAATTCGAAATCAGGCGTATTTTACCGTTGATCTGGAAGGGGGG GGCTGTTCCCAACTATTGTACTATTTATGGAGGGATAAATGAACCGCTGG GTTATAATTGGGCTATATTTGAGGCCAGGGTGAAATTGTAATGGGCATAA AATCGCCCCTAATTTATGAATCGGGTGGCAAAAAGTGAAAATAGGTGTGG CTAATGTGGGGACTTGTAGTAATTAATTGGTTG

Sequence 170

CCGGCAGGTACGCGGGGGGACTTACAAGATGGATAGGACCTGGTGGCAG CTGTCCTTGAGGAAGCCAGAGCCTGGAGAGACAGATCTCATGTTATAGCA GAGTACCT

>Sequence 171

>Sequence 172

Page 34 of 990 of Table 4

#### Table 4

AGGTACGCGGTGACATTGTAGTGGGTGTGATGGAACAGGCTCTCAGCTGT GCATTGGGGTGCTTTAAATTCTCATCAAGGAACTCATCTTTTTGGAGTA'AG ATACTGTGTCTCCGGGAGGCCTTTGCTGGAAGAAAATACATTCGCTGTGA AAGTGCATAAAGACAATGAATCCTTAACTAACGTTAATAACAGAGTGGGA GCACGTTCTGGCCATGTGTCAGGCGATCATAAGCAGCAATTCTGAACGGC TTCCCGATATCAACATCTACCAGCTGAAGGT

>Sequence 173

CCGGGCAGGTACTTACTTTGATTCCTCTAGTGCAAGATTATAGTGGGGTT GGTAAGGACTACTTCCCCAAACGCCCTTTTAAACATGTGAGAAAGGGAAT CTGCCTGACATACTGGTATGGCCATTTGTAGCAATATACTGAGAGTGACT TGGGTGATTTTCTGGGGTGATCAACCACATTCCATGAGCAGGTTAACTGT GGAAGACACCTGCCCTTGAGCATCGCGTATGGGCCGCATGCGTCAATGGG GAAATCTGTGTTTCCATTCTGCTTCTTGTTTTGCCTTCACAACTTCAGGG ATAGAAGCGTATTCCATTTTTAGTTAATAATCAGCTCTCTGGGGCTTCCA TGTAATGAGTCAGACACTGATGACTGACTCCACTCTGCTCATTATCATGT CTCCCAAAAACAACCCGAGAACCCACTGTGTCAAGTGAAGCTTTAATTTT TCAGGGGAGGTTTTCTGCATTGAGACCAATACATCTTTTCTTGTGACAGA TCCAGTTACCATATGTCCTTATTTTTAACTGTCGAAAAGACAGTTAAGCT GCAACAGAGTATGGTGAGTTTACCAATTGTAATACTCGAAGCACCAAACA AAGGATCAGTGTTGCAGGCTGTCTTTTATTGACTTTGTCCAACTCTTCTT AGCAGATAACCAGGATGATATTGTTTCTGTTTTACAACATGATGATTGCT ATATCTCTATATTAACTTTTGAAATTGATTTGCAACCCAATATTCCTCTC AGCTGCATTAGAATTTTCTAAAAGAACATGAGACAC

>Sequence 174
AGGTACACACAGT

AGGTACACAGTTAACCACAAAACAGGCCTCTCTGAAAAAGCCATTGCC
ATGGACTGCCAGACAGACAATGACAAGACACAAATACCTTCTGGTGTGTG
AGCCACGGGACATGTGAGCTTCCCCGCTGATGCTCCTCTTATATCAAAGA
TCACTTTCACAAGATGAGCGACTCAATATCTTTTATCAAACCAATGGTCA
CCTGCAAGCTATGGTATATTTTTTGCAGCTGTTGTAGAGCTATGTGGCATGA
GAATGTGGGA

>Sequence 175

CCGGGCAGGTACGCGGGGGGACTGGGGAGAACTTCGGAGGATGTTCATGT CCAGGAGCAGCCCACGCCCTGTATGGTCGGTGTCTAGAGCCTCACAGCA ACTAAGACCAACCCAGCTCTCAGAAGAAGGAATGTCAAAATGTCATGTTC AATTTTACATTCAGTGCCTGGAATCTTTTCTTCACAATTGAAATGAAATG TGCTGAAGGAGGTGAATCCATGCATTAATCTTCAGCTCACAAAGGAAATA CTACATAAGAAGCAAGACCACAGACTCAAGACGGACATAATTGGATTTTT TTTGCCATGGCCTGAAAAGAAAGGTACCT

>Sequence 176

CCGGGCAGGTACTGAGCACAGCACAGTATGGCTATCATAGAGGGAAAATT AAACTGAGTCACAAAATGCATTTTATAATAACACAGTAATGCATTTCATC CCTGGGTATAAATTGAAAATGTACCTATTACAGAGTGTTTTAAAAATTCA CTGGAATTATTGTTCTAGCATAGGTAAGTTTGAATAAAAAGAGTAAAATG AAATCAGTCTAGTCTTAAAATTGAACTTTTAAAACAAGAAAAATCATTAC **AACTACTAAGATTATTTTTAAAGGTATCACTTAATGACTTAATTACATCT** TGCTATCATTATCTCTATTTTGTATACAATCCATTTCTGTATTTTACCAT AACTGGGAAAATTAAGAATATACGTGATCTTTAACCAGATCAAAAACCTT CATATCCCATGCTGATTATTCAGCTGCCTCTGAATCCTGTATCTTCACGC TGCTCTCACGTGTGCTGCCTGATAAGTATATGTGAGGTTGTAAGTTATTC CTTACTCGCGGTTCCGGGTGCTCTTGTGGATTTTGACCTGGAGAGTCTTT TCTTAGGGCAGGGTCTTTCACATGGTCTACTTCTACTTTATTAGACCCAT AATTAGGTGTTTAAAGCCCAGGAATGAAATTATTACTCAGCAATTACCAT GCCTTCATCAATTTCATCAACAGAAAGTTCCAGTTGTGCAGTTTCACCG CTCTTCATGCCAACATCATCGCTTATTGAGCGTACCT >Sequence 177

> Page 35 of 990 of Table 4

## Table 4

CCGGGCAGGTACATGACAGATAAATACAGTTATTTCCGGCAATCATTAGT CTCAATAAGAAAATGATTCTCTTTTCTAAGATAGTCTAAGAAGTGGGAGG CTTCCAAACTAAGTGTCAGGACCTTACCAGGTGGTAGGGTGGGCCCCATG ATATTATCAATCCCCTCAGCTCCCTCTGCACATACGACTGAGGGCATCCA GAGTNCCCTGGATGNAGTCTTGGCCCATGCCTGCCTTGTAATATANTTCC AAATNNNTTATCATTTTTAAAATCAAATTTTTCCAAAGACCCAGGGGTCT CTCAAAGGTTANCCCCAGGCNNAGGCATTGAACCTCCTGGNNGCTCAAAN ATGATTTCTTTTTACCTTTCAGCCCTCNNCTGAGTANGCNNTGGGATTGG GAAGGTNNGCCCATCNNACCACGCNNCTGGCNCNNACTTTTGGGTGTNNC TTCACAATNNGAAAGNNCTATTGGGANNAATTATTGGGACTANAGGGANA CNNNCTCATANTNNGATGANANATNNTCTACNNNGTTGAANNNAAGTTNG AAGGGTANGAAAAAGGGTGGNGGCAAGAATANANNATTTTTCCCTTACCT NNTAAGAANATTATTAANNATCTTTATAAGAAAGATANAAAAAGTTTAAT TTAATGAAATGGGCTTAGGGTNGGNTCTGGAATNTTNNCTTTTGCTTGGT ATTAATTCAATCTTTCTAAAGTTTCCCTGGGGTCTTAAATTAGTCACCCT TTTTTAAGTGAAACCCTTGTTCAAAAATAAAGGGACTTTTCAANNTGAAA TATTCCCTTAATTGGGGGTAAAAATCTTCTAATTTCTCTTGCTTCCAACT TTCCTTTTAATACTTTAAAATTTTGTGTGGATAAATTGGANAAAATTCTT AAAAATGAAATNAGCACCCCGGAGAACTTTTCAATTGTTTTGGAACTGG TAAAAATTAAAAGCATTAATITCAAATCAAATGGTCTGGAATAAGAATCT ATGGTACCCTCGGGCCGCTCCTAAGAACTAATGGAATCCT

AGGTACTCATCTGTGAGAAGTGGAATAATTCAAAGATTCACAATGGCTTT CCTCCCCCAAGGTCATCAGTGTTAACTGCCAACTAGATCCCTAGCCCACC CTCTCTGCTCATCCGAGCAGCAGATGCCAGGTGGGAGTTGCTTTTATGCA CATGGGATGTCACTGTGACTCTGTTCCTGTCACTCTGTAACATAAGCTCA TTCATTTTTCTCTAGGTATAGGTATGGATTTAATTATTTTAGTCATT ACATAATAGTCCACAGTTTAGATTGCCACAGCTAACCATTCTGTATATC ATGGACATTCAGGCTCTTATAGTTTTAAGCTGCTTAATTATTCAGACTAT GATGC

>Sequence 179

AGGTACATGAAAATGCACAAGACTCTTCCCACCACTGACCTCAGTGTCTG CCCCAGGAAGAAGAAGAAAAGTTTTGGCTCGAAAATGCTCTTCAAGGACA CAAGGCGGTCACCAAATTACAGCATGCAGCTTTCAGGGGATGACTAAAAG GATGAGGATGATGACTCATAGCTGGGGACAGAAGCGAATCCCTCTTGCTG ACCTGTGCCCTCCTTTGCACCGGTGTTCTTTCTCAGCCCTCCTGGGGTGA GGATGTGACTGTCCCCTGGGAAAGCTTGGCAAGATAAGAGTAGGAGCACA AAGAAGGAGGTAGATAGAGAGTGGTTTGCAGTCGATACTCAGTGGTTTGG GTAGGC

>Sequence 181

> Page 36 of 990 of Table 4

#### Table 4

AGGTACGCGGGATATGGTTTGAGATATTATTGCTTGTGTTTACATTTCCA
CATTTGAGGCAAAGTTAGACTCCAAGTTGAATTCATTAAATTTTGATTCC
AACATTCTGTTCTTCCTTTGGGCACAGAATTCCTATGAAATGAAACACTG
GGTTTTGTTCCAGAACAAGAACAGACTAACCCAAAATTTCTCCTGGGGGA
AAAAAAAAGAGTAAAATTACATTTCTCATTGAAAATTGTATTTCTCATTG
AGGAAGGGTGTGTTACTTTATTATATAAAAATGCCTTATCTTCATTATAAG
AAAAAAATGCCCTTGCATTTGTCACTGTTGCCATACATTAGGCCTGTAT
>Sequence 184

CCGGGCAGGTACAAGTTACCTACCCTTTGCTTGCCTCAGTTTCCTCCTTT GTGACAATGGGGACAATAACAGAAACTGCCACACAAGAGGGATGTTAGAG AACTGACCAAGCGAATGTAAGTAATGACTTGGAGCAACGTATGGCTAAGA GTAAGTTAGGGGTTGTTACGATGACTTTCCTGAGATAAACAGGGAGATCT TTTAGCTGTGGGTCAAGTGCAGGAGGACAGTGGAGCTCAAGGCCTAATGG AAACTAACACTAATTGTACCT

>Sequence 185

>Sequence 187

> Page 37 of 990 of Table 4

CCTCAGATCAAAACAATAAACAAAAAATTATGATATCCTTAACAATGTCC TGGGTTAATATTTTATTCCATAAATCAAGTTTTCAGAACTCTTTACCCTC TAAGAGATACAGATTGAACATGCCTTTATAGGCTCTGAATTTCATAACTT CTAATCTATGCTCATAACCTGGAAAATGTCATCATACTGAATGCCCACAT GAAAAGGTACCTGCCG

>Sequence 190

>Sequence 191

CCGGGCAGGTACGCGGGAGGTTGTGGCGGCGCGCCCTGCTCTTCCCCG CTCGTCTGGGGCTTCTGCTGGCTAGTGGGAGAAGTGCTCTTCTAGGGGG GCTTTTCTGGCCCTTGGCAGGGGTTTGGAGTTGGAGTCACACGGGCCAAT AACTCATCACCCCAACACTTCTGAGGTGGCTCCTTGTGCCACGGACTCCG AGGAGTCCTTCAGCTACTGAACACTCAAAGCTGAGGAGGGCAATTTGGTT CTGATGCTGTGCCAGAAATCTTCTGACAATGAGTTACTGGAACTTGGAAA AAAGGAACTGAGTGCAGTACCT

>Sequence 192

AGGTACACCTGTAATGGCTACCCGCTGGCTCAGAGCTCTGCCTCACCGC CCTGCCCCGGCACCTGCAAGCCAGTGTGCCACTTTTTTGATGTTGTATGT TTTTAATATTCCCTGAGACAGACTCCAGAGTTCTGAGTTTTCTTACTTGG GGTGTCAAATTATATTCCAGGAACCAATTTTGGGTTTTCCTGGCTTCTGGT TAAAAAGCTGGACAGATTTTGAGTTGTTTGCTCTTAGTTCTCCATAAAC TGCACTATTTTTAGGGCACTATTTTGTAGAACACAAGATTTTTCAGGAAG TATATTGAAAGGCCTGTACCTGCCCG

>Sequence 193

AGGTACAAGTTGTCTTTATGCTGCGAGATAAGTCCTCTCTTGGTTTGAGC
TCCCACCTTTTCAGTGAACTCTTACATTTTGGGGGATCTGCTCTTGTAAA
GGACATCCTTTCTGGTGAGTATTCTTTTGGTTTAATTTTTGGTTTGGTTA
TTTGTGCATGAATTTAATCTCATTAGGAAACAAGTTAAGTTGAATAGACC
AACTAGTGAATTAATCCGTCACCAAAATATATGTTTTTTGGCATTTACCTG
TTTATTTTGAAACTCTTTGTAAGAAATGTAAACCTGTAATGATAATCTCT
GCTTTGTAAGGATATCTCCCTCTCTGACACCTAAAACACTAGATGCTTTC
N

>Sequence 194

AGGTACTITAGCTACTCGAACAGCATGCAGACAGGGTAAGAATCACAGAA CCTGGCCGAATACACAGCTCATTCAGCATCAACCACAAGGTGGCGCTGCT TCAATGCTGATTCAGATGCACAGCCCTGCTAGAGACGTTTCTCCACCATC AAGGCTACATTTGCTTGTGTCCTTTCCAGGCCGGCCAAAAATGCTTTCTC CTTAAGGTTTCAGGTAATACACATATGGCTAACAGTCTATATTGAGAAAG TAAACCACTGAGGCACACCCCCACCTACCCCCATCTTAGGACAGCTCT GACTGCACCTGAGAGGACTTATCTCAGCCTCCCTTAGTTAACAAGGCAAC AAAGT

>Sequence 195

TCGGCTCCCAGCTACTCACAGAGAACGTTTCTGTTTCTGACAGCAGAGTA AGAGAAGAGGAGAAGAGAGACAGCCCATTCTCTTTTGGCCTAATTCCT AAGGAATCATGCCTCTGCCTTCGGGCCATTCTCAAGTCTTGTTCAAGGAT AAAATGATTTATTGATGGCCGTAATTAAAAAAGCAATGCCAACGGAAGCAG CGTCAGCATTTTTCATTTATACCT

>Sequence 196

> Page 38 of 990 of Table 4

TTGACTTCCTCTTCACAGGTCAAGGCAGGACTGTAGCATTAGGTCTCAGA GATGCAATGAACAGGACAAATACACTTCCCCTTCATCTGGACCTGAGGCT CTGGGCAAGTCAGTACCT

>Sequence 197

>Sequence 198

>Sequence 199

AGGTACGTGACGGAAGGGAGGCTCACAGGGATGGTGTCTGCGACCCACTC
AGCTCTGCCATTTACCATCACCTGACTTTAAGCCAGTGTCTATTTTGTAG
GGCTGCTGTGGGGACCAATATGAGCTGAGAGCTCTGCCAGGCACCCTACA
TGATATACCTGTAAGGGAGCGTCCTTCTGCGGCCTGAACCTGAAGCTCTT
CAGAGGGACCCATGCTGGGCTCTGAAGAAAGTGACTCACCTTCGAGGAGC
AAGGGCAGGTCACATTCCATGATGAGAAATTCTCACACCACCCTCCTTCA
TATTTGACTCACATCATGCAGCATGGACTTCCACTCCAGTAAATGAGTC
>Sequience 200

AGGTACAAGTTGTCTTTATGCTGCGAGATAAGTCCTCTCTTGGTTTGAGC
TCCCACCTTTTCAGTGAACTCTTACATTTTGGGGGATCTGCTCTTGTAAA
GGACATCCTTTCTGGTGAGTATTCTTTTGGTTTAATTTTTGGTTTGGTTA
TTTGTGCATGAATTTAATCTCATTAGGAAACAAGTTAAGTTGAATAGACC
AACTAGTGAATTAATCCGTCACCAAAATATATGTTTTTTGGCATTTACCTG
TTTATTTTGAAACTCTTTGTAAGAAATGTAAACCTGTAATGATAATCTCT
GCTTTGTAAGGATATCTCCCTCTCTGACACCTAAAACACTAGA
>Sequence 202

>Sequence 203

AGGTACAAGTTGTCTTTATGCTGCGAGATAAGTCCTCTCTTGGTTTGAGC TCCCACCTTTTCAGTGAACTCTTACATTTTGGGGGATCTGCTCTTGTAAA GGACATCCTTTCTGGTGAGTATTCTTTTGGTTTAATTTTTGGTTTGGTTA

> Page 39 of 990 of Table 4

#### Table 4

TTTGTGCATGAATTTAATCTCATTAGGAAACAAGTTAAGTTGAATAGACC
AACTAGTGAATTAATCCGTCACCAAAATATATGTTTTTTGGCATTTACCTG
TTTATTTTGAAACTCTTTGTAAGAAATGTAAACCTGTAATGATAATCTCT
GCTTTGTAAGGATATCTCCCTCTCTGACACCTAAAACACTAGATG
>Sequence 204

CCGGGCAGGTACTAGGATTGCAGGCATGAGTCACTACACTCGCCCAGAAA
TTTGTTTTTAGAGTAACTACCATGCCATTAACAAACCTGACAAAATTAAC
AATTTCTTATCTTCAAGAACTCAATTCATATTCAAATTTTTATCATCTCA
AAGCTGGTTTGTTCAAACAGGAGTCCAAAGTCCCCATACTGCATGTCATT
ACTGAGACCATACTGGGACTAAGGCAGGGAGGAATGAGCCCTAAGTGAGT
CTGTAACAAGCGAGAAAGAAGCTCATTCAACTAAAAGAATTAAATTGGAG
GTCTGGCCCAAGAAAGTGGAAAAATAAACAAAGAAAACTAAAACTATTCA
>Seguence 205

>Sequence 207

CCGGGCAGGTACCATTCTCCAGGCACATACAACATGAAATATCATACAGC TGTGAAAGATCTGGTGGAAAGCTGGAATATTGAGGAAGAAACATTTTTTG AAAATTATTTCTCTCTCTAAGTCNAGTAAATGTTTGATANTAATTCTGAG TGCATGGCTGTAGTCTGAAAGTTTATNNGTGCCCCTAAAATTAATATNNG TCAAAATCCTAAAACCAACCCATGGTGATGATTCAAGAAGGTTANGGCCC CTTTTGGGGGGGAAAAAA

>Sequence 208

GGGGCCATTGAGACTGCCATGGAAGACTTGAAAGGTCACGTAGCTGAGAC
TTCTGGAGAGACCATTCAAGGCTTCTGGCTCTTGACAAAGATAGACCACT
GGAACAATGAGAAGGAGAGAATTCTAGTGGTCACAGACAAGACTCTCTTG
ATCTGCAAATACTACTTCATCATGCTGTGNNGTGTGCAGCTGCAGCGGAT
TCCTCTGAGCGCTGTCTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTG
GGATGTCCCTGGACAAGAGACAAGGAGAAGGCCTTAGGATCTACTGGGGG
AGTCCCGGAGGAACAGTCTCTTCTGTCCCGCTGGAACCCAT
>Sequence 209

>Sequence 210

AGGTACGCTGGGAAGATGCTGCCAAGCAGCAGGATCACCAGCTTAGCTGT GTGTGGTGAAGTTATGCAAATACCTCCCCCTGTCAACTGTGGCAGCAAAG

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## Table 4

TCCCCGGAAGGACTTGGACTGTCCTGGTTTGATATATGCTCATTCCCCCA TCAAGCACTGTGGCCGGGAATCAGGAACTGTGACTGGTCTGACCTGGGTC ATGTGCCCACCTCTGGCTGGTAGGAATGGTTTTGATTTTGTGATCAATCC TGAAGAGGAAGACAGGTGCATGGCAAAGGAAAATGGGATAGTACCTGCCC

>Sequence 211

NCGNNCGGNTGGCGGCCGCCCGGGCAGGTACGCGGGAGGTGGTGNGCGA AGCGCCTTCCCTTNCCGAAAGGTTTCGGAAGCTGGTGGTAGCTCTGAAGA TAACGCTGCGTTAGGGCATACTGGCCGAACCGGGGAAGGGGAATGGAACT CCGATTGAAAGCCAGTTGCTGGAGTGGACACCAATTTCAACAAGCCGATT GGTTTAAAAATTNTTTTTAAAAAGGGCCGTGAAAGGGTTTTTTTGAAATTT CCGTTAAAACGCCCACCCCAAAAAAATAAA

>Sequence 212

>Sequence 213

>Sequence 214

CCGGGCAGGTACAGTGAAGCTTTGACCTGAGGAGCTCTTCTGTAGGTGAA GAGTGGTTAACTATGGTTCCTGTGTGCCTGGGGCCCCCCACTCCTAGGAC TCATCCACCCCCTACCCAGAACTTACTAGTACCT

>Sequence 215

>Sequence 216

>Sequence 217

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# Table 4

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TCGGCTCCCAGCTACTCACAGAGAACGTTTCTGTTTCTGACAGCAGAGTA AGAGAAGAGGTGAGAAGAGAGACAGCCCATTCTCTTTTTGGCCTAATTCCT AAGGAATCATGCCTCTGCCTTCGGGCCATTCTCAAGTCTTGTTCAAGGAT AAAATGATTTATTGATGGCCGTAATTAAAAAGCAATGCCAACGGAAGCAG CGTCAGCATTTTTCATTTATACCT

>Sequence 219

>Sequence 220

AGGTACGGGAGGGCGTAAGAATGACTACCAGCAATCTGGCTGAAAGAGA GAATGGGATAAGGAAGACTGAAGGAGAAATGATTTTAGAGTGGGGAGTCT CAGGAGCTCTATCTCAGATATACCAAGTTTGAGGTGTATTAAGACAACCA GCCAGGTGCAGTAGCTCATGCCTGTAATCCCAGCAAGTTGGGAGGCCAAG GCGGCCAGAACCCGAGGTCGGTAGTTCGAGACCAGCCTGGCCAATATGGT GAAATCCCGTCTCTAAATTTTGTATCTAAAGATACAAAAAATTAGCCAGGT GTAGTGGCACGTGCCTGTAGTCCTAGCTACTCAGGAGACTGAGGCAGAAG AATCACTTGAATCCGGGGGGCGGAGCTTGCAGTGAGCCGAGATCCCGCCA CT

>Sequence 223

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AGCCTTCCAAGGATAAGCTGAGCCCTGGACAGAGGAGGCTCCCCTTCAGG
CCAGCACTGCCCATTACTTGAAGACAAGGTGAGCCTCAGCCTGATGTTGA
AGGCTAGCATTAGGAACCCCGCTCAGGATCTCCCATTCTCCAAGATCTGC
TTTATCAATAAGAAAGGGGATGCTGCCGGGCCTGGTGGCTCATGCCTGTA
TTCCCAGCACTTTGGGAGGCCGAGGCGGTGGATTACCTGAGGTGGGGAG
TTCGAGACCAGCCTGACCAACATGGAGAAACCCCGTCTCTACTGAAAATN
>Sequence 224

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#### Table 4

TCTTCCCTAGGGTGAAGGGGAAAATCATGTTTCACAATTTCAGGGAAGTC TGAATGGTAGGAGCCAGGTTTTCACATTCTGGTCTTTAATGCATAGTGGC CATTCATTCCATTAGGCTTCTTATGTCATGACATAAT

>Sequence 225

>Sequence 226

CCGGGCAGGTACGCGGGGAGACTGAGTGGGGTCACAGCACAGGGCACTGT CTTGCCTGGCTTTATCTGAGCCAATCACACCTCTCCTGGCCACTATCTGT GGTCTAGCCCCCTTTGTGCAGAAAGAGAAAGAGAGCCTTGAGGACCAGC CTAGTCAGGCTGAAGAAATGTCAACAATTGGGAGTTTTGAAGGATTCCAG GCTGTGTCTCTGAAGCAAGAGGGAGATGACCAACCCTCTGAGACTGACCA CCTATCGATGGAGGAAGAGGACCCGATGCCAAGACAGATTTCAAGGCAGT CAAGTGTGACCGAATCAACTCTNTACCCCAATCCTTATCATCAGCCT >Sequence 227

>Sequence 228

>Sequence 229

CCGGGCAGGTACTTCCTGCAATGGTGGAAATGTTCTCTGTCTACACTGTC
CTATATCGTAGCCACTCGCCACATGTGGCTATGGAGCTCTTGAAGTGCGG
ACAGATGGACTGAGAAACTGAAATTTAAATCTTACATAATTTTAATCATG
AGATAGTGGCTACTTGACAAGATGCTGGAGAACAGGCTTTTGGAACCAACA
TGATTCACTGACATGAAGCTCCCACATCTTGGCCTATGGACACAATGAAC
AATGCATCTACTAGCTGTTTAGGGCAGCCTGTGAACAGAGCACACAGCTA
TTGCAAACAAACAGACCCGGGTTCAGAGTCAGGA

>Sequence 230

>Sequence 231

CCGGGCAGGTACTCAAACTATAGCCCCAGGGGAAGACAAACGGTCACAGA

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>Sequence 232

CCGGGCAGGTACGGAAGACATGGGAGTCTGTATGCAGCACGACGTCTTGT
TCAGTTACCTCACTACTAAGGAGCACCTTCTCCTATATGGTTCCATCAAA
GTTCCTCACTGGACTAAAAAGCAGCTCCACGAGGAAGTAAAAAAGGACTTT
AAAAGATACTGGACTATATAGCCATCGTCATAAGAGAGTTGGAACACTGT
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TCAAGGGTAGTAATTTTGGATGAACCATCTACTGGAGTTGACCCATGTTC
TCGCCGAAGTATATATGGGATGGTATATCCAAGAACCAAACTGCCAGAACAA
>Sequence 233

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AAGGACAGCTGCCACCAGGTCCTATCCATCTTGTAAGTCCAGTTCTTAAC
GTCCCCGCGTACCTGCCCG

Sequence 234

AGGTACTGGAGGTCCGAGCTACCACAGAAGACAACAAAAATCAATATAAG
GTATAGGAAGATTGGAAAGAAAGAAAACAAACCACCTAGGCTGAAATCCC
AAACAAACTGGACACGCAAATTATTAAAGGTGATTTCATAAATGTTATGT
CATTTAAGACAGCCATATAAAAAGGAATCATTATTCCCATTTTCTCTATGA
GGAAATAGAGGCTCAGAAAGGTTTTGAGCAACTTGCCTGAAGTTGAAGTC
CCCCCAGCATATAAGTGCTGAAGCCAGAATTCAAACCAATTGATAATTT
CAGTGCTCTTCACCGTAGACCACATGACCTCCCCTCAGTTAATATTCACC
C

>Sequence 235

>Sequence 236

AGGTACCTACTATGGGACCTAGACAGGCTGTTTCACTTCTCTTATATCTG
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CAGTGATTTGGGGAAGGATCTTGGGCCTCCACTTGCAGTGACTATAGTCA
CTATAGCTTCATCAGCAGGGGGGGGAAATGATGCTGCCTCCAGCTTGAGA
GTGATGAGGCCAGCACCTCCTGGGAGCCCTCGATAATTTTATCTTCTTTT
GCAATCCTTCCCCAAATCTCTTGGTTCCACTCAAAACTAGGAACAGTCCT
GCCCACTGTGGCAAGCTGTGGTGCCCACCTCTTACAGCTGTCCCCACA
SCAURACTATAATTATTCACTTTTATCCCATTGCCTGTAATGCA
>SCAURACCC 237

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>Sequence 238

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CCGGGCAGGTACGCGGGTGTCCTTGAGTTTTGAGCTCATGGTTAAAGCTG
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CAAGGTGGTGCAAAGGGCCCTGGGAGGAGGGTCCCAGTTGCCCACCCTTT
GTCCACTGCTTTGTGATGAATCTAGATCACCTTGTGGTTACCTGCCTAT
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TGGGGCAGATCAAATGAAGGGACCAGCAGTGTTCATAATGGTGCTGAAAT
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GTGCTCAGCTATTTGTTCTTAACATA

>Sequence 239

>Sequence 240

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ATCTGCAAATACGACTTCATCATGCTGAGTTGTGTGCAGCTGCAGCGGAT
TCCTCTGAGCGCTGTCTATCGCACCTGCCTGGGCAAGTTCACCTTCCCTG
GGATGTCCCTGGACAAGAGACAAGGAGAAGGCCTTAGGATCTACTGGGGG
AGTCCCGGAGGAGCAGTCTCTTCTGTCCCGCTGGAACCC

>Sequence 241

>Sequence 242

>Sequence 244

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> Page 45 of 990 of Table 4

## Table 4

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CCGGGCAGGTACGCGGGACATTCAGAGGTGAGCCCAGATCGGGTAAAGT GGACTGGGGAGAACTTCGGAGGATGTTCATGTCCAGGAGCAGCCCCACGC CCTGTATGGTCGGTGTCTAGAGCCTCACAGCAACTAAGACCAACCCAGCT CTCAGAAGAAGGAATGTCAAAATGTCATGTTCAATTTTACATTCAGTGCC TGGAATCTTTCTTCACAATTGAAATGAAATGTGCTGAAGGAGGTGAATC CATGCATTAATCTTCAGCTCACAAAGGAAATACTACATAAGAAGCAAGAC CACAGACTCAAGACGGACATAATTGGATTTTTTTTGCCATGGCCTGGAAA GAAAGGTACCT

>Sequence 246

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>Sequence 248

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>Sequence 250

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>Sequence 251

AGGTACGCGGGGACACATTCAGAGGTGAGCCCAGAGCGGGTAAAGTGGAC TGGGGAGAACTTCGGAGGATGTTCATGTCCAGGAGTAGCCCCACGCCCTG

> Page 46 of 990 of Table 4

>Sequence 252

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>Sequence 253

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GCTGGTTTCAACAATGAATAAAGCAGGACACCCTGCTTTAGAGGTTGAAAT
CAAAATGAAGAGCTTTGGAAAGAGATACCTGCTCTACAGTGTGGTGAGTG
CTGGAATGGAGGAGAAAGCAAGAGGAATAGCAATAGAGTCAAGTCTTGAA
GGATGACGGCACATAAGGAGAAAGTGTTCCCCACACTAAGGAAGAAAG
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>Sequence 254

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ATAAATAGACAACTTCAAATTTGCAGTTTCTAGATGGTTTGGAAAAGGGA
ACATTGTGGTGTAATTTATCAGCCATCAGATCCTAGATATTTGAGATT
TTAACTAAGCAAGGTATTAGATAGACCATGTTGTTTTTGGCTTCACAGAAT
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TATCATTATATCAAGTTATAACAATCTGTTTACCTTTATCTCCTCTAGTG
GCCTGAGAACCTCTAAGAGGCAAACACAGTCCCCATACAGGAATGGGATG
TCTGCAGAGCTGTATAACTACTCTCTTCTGTCTGAAGAATAAAAACAACA
TTATACAAAGGAAAAGATGGTTCATTTTCTCTCCTCAGCAGAGATGTCC
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>Sequence 257

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#### Table 4

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TCACTTTCACAAGATGAGCGACTCAATATCTTTTATCAAACCAATGATCA
CCTGCAAGCTATGGTATATTTTTTGCAGCTGTAGAGCTATGTGGCATGA
GAATGTGGGACTTATAAATTGCTGATCCAATTAATAGACATTATTGGGCAA
CAGTGTCTTATCAGCTAGTGTGTACTAAGGTGTCAGGAACAGTTGTTCTG
ACCTTACTATCCAACGAGGAGTAACTGATTCACTTCTCAGAGGTATATTA

>Sequence 259

>Sequence 260

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GATCTTGAACTCCTGACATAAGGTGATCCGCCCACCTCCCAAAGTGCTAG
GATTACAGGCGCGCCCAGCCCTGTTGTATTAGTTTTCTATTGCTTCCATG
ACAACAAATCACCACAGGCTTGGCAGTTTAAATACCACTGATTATCTCAC
AATTCTCAAGTCAGATGCCTGAGTTCAGCCAGGCCCAGCTGGGTCCTCT
GCTCAGTCTCATGGGGCCAGTTGTCTGAGGTCTGAGGCC
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GGGTCC

>Sequence 261

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TCTGTGCCTTAAAAACATGCCCAAGGCCGGGCGTGTTGGCTCACGCCTCT
AATCCTAGCACTTTGGGAGGCAGAGGCGGGTGGATCACGAGTTCAGGAGT
TCAAGACCAGCCTGGCTTGCACGGTGAAACCCCGTCTCTATTAAAAATAC
AAAAATTGGCTGGGCATGGTGGCGGTCACCTGTAGTCCCCGGTACCTGCC
CG

>Sequence 262

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>Sequence 263

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#### Table 4

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>Sequence 264

>Sequence 265

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GGAACAATGAGAAGGAGAGAATTCTACTGGTCACAGACAAGACTCTCTTG
ATCTGCAAATACGACTTCATCATGCTGAGTTGTGCAGCTGCAGCGGAT
TCCTCTGAGCGCTGTCTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTG
GGATGTCCCTGGACAAGAGACGAGGAGAAGGCCTTAGGATCTACTGGGG
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>Sequence 267

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>Sequence 268

>Sequence 269

CCGGGCAGGTACGCTGGGGCAGCGGGAAGCTCGCAGCAGCTGGGGAGGAG

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#### Table 4

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>Sequence 270

>Sequence 271

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TCATTATAAATGCCATTATCCTTCTCTACAAGCGATCAAATATTATAAGG
TCTGACAAGTTAGTTTTATGTTTGCATTGTAACTGAAGTCCCATCCT
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>Sequence 273

>Sequence 274

>Sequence 275

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> Page 50 of 990 of Table 4

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>Sequence 276

>Sequence 277

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>Sequence 278

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AGTGTGCTGTGATTGCTCCTGTGAGTAGCCACTGCACTTCAGCCCTGGCA
ACATAGCAAGACCCTGACTCTAAATATAAAAAAAAGTATAGCGGGCACAA
ATGGGGCGAAGCCAGGGTGGGATGCAGAGTCTAGAGGGAGATGAAGCTGG
AGAGGCAGGCAGTGGTCAACATGTGGCCATGGAAAATAGTTTAGGTTTGA
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>Sequence 279

>Sequence 280

>Sequence 281

AGGTACCAATATTCTGCAGAAAACCAAAACCCACCTGCATTCCTANCTC
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TTTTGAAAGAACGTTACCCTTTTCTTCACCCAGCAAATTCTTACTCAGAC
TTCAAGACTCAGTTCAGAGTCTGGGGATGAATATTCTACAAAATGGCCCCC
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>Sequence 283

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ACTGAGACCATACTGGGACTAAGGCAGGGAGGAATGAGCCCTAAGTGAGT CTGTAACAAGCGAGAAAGAAGCTCATTCAACTAAAAGAATTAAATTGGGG GTCTGGCCCAAGAAAGTGGAAAAATAAACAAAGAAAACTAAAACTATTCA GGAA

>Sequence 284

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>Sequence 285

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>Sequence 286

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>Sequence 287

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>Sequence 290

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TATTATCAGTGAAGAGGGCTTTTTGTTATAGTTTTAATTTTCTTTTATTC
TAGAAATTGCCTCAGACAGGGATTGATGTCAGGAGCCTTCAAGGAGAAAA
ATATACATGAATGGGAGACCCCAGGTTGCGGGCAACAAGAGTCACAGGTA
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GCTTTGTACCTGCCCGGCGGN

>Sequence 291

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GGAACAATGAGAAGGAGAGAATTCTACTGGTCACAGACAAGACTCTCTTG
ATCTGCAAATACGACTTCATCATGCTGAGTTGTGTGCAGCTGCAGCGGGAT
TCCTCTGAGCGCTGTCTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTG
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>Sequence 292

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GCTTTGGACCTGCC

>Sequence 293

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AATTCTTATGGGCTATGGTTAGGGAGGTTGGCATGTTATATGTAAAAGC
ACTGTAGGGGGACATTACCCAATTCCCTAGCCCTGCAAGGATGTCTATAG
CAAAGACTGCCAGTTGCCTATCCAATACCCCTTCTGCCATCTTCTGCCTT
TTATGGCTCACAGCTGCCCAGTCCCTCATAGCTAGATGTGACCTTGTGAC
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>Sequence 294

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>Sequence 295

>Sequence 296

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AAACCAAACTAAAGACTACTATACAACCATTTAAAAGAATGAAGTCACAA
TATGATGACATTGGAAGGAGCTCCAAGATTTAGGTGGTGGAAGAGGGAAG
GCCAAGTTTCAGAAAATGTGCACAATATGATACCACTTATGTTAAAATAC
AAAGTAAAACTACAAAAACTGAAAAGGCTTGGAATGGTTACCTCTTN
>Sequence 297

>Sequence 298

>Sequence 299

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AATTCAAGTTAGCATCCCAGTGATTAACTCTGGAACTGCCTAGCCAAAAA
CAACTTTCGGCACCTAAAACATAAAACTGTCAGTTTCCTCTGCTTTGGAGA
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AGATAGAACTAN

>Sequence 300

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AAAGATATTGAGTCGCTCATCTTGTGAAAGTGATCTTTGATATAAGAGGA
GCATCAGCGGGGAAGCTCACATGTCCCGTGGCTCACACACCAAAAGGTAT
TTGTGTCTTGTCATTGTCTGTCTGGCAGTCCATGGCAATGGCTTTTTCAG
AGAGGCCTGTTTTGTGGTTAACTGTGTTACCTCAGCCGAGGTACCTGGG
AAAAGGCTGTTTTGTCACCAGGTGGGGAGAAATTCACCTTATGGTACAA
TTGCTCTCTTTGGTTCATTATTTCTGTGAACTCCTCANGAGACACCACT
TTCGGGAGGCTATGCGTTTTGGCAAGTCTGGATGTTGGTCGACACCATCTTG
TCCAGGAGAGACCCTGGAGCAGCATCCTGGGATACTCGAAATGAAAAGAA
ACTTGGTGCTAAACCCGAGCCCTAAGAGATGGCACCA
>Sequence 301

AGGTACTACGGTGGTAACAGTGTTGAGAATTCAGCAGCAACAAGATTGAG
AATCCGGCAGAGCTGAACCAGTGACAGATTCGCAAGGTGGACTATTTGGT
GGCACGACCCTGGTTGTGTTTGCCACTGCTGAGCTTTCCTTGATTTCTGC
TCATTTTCAGATCTGGTTCTCCCATGTTCTTGCTGATTCTGAGAGCTGCC
CAACCTACTTCAATAAATTCCTTTTCTGCATAAGACAGCCAGAGTCAGTT
TCTTGGTTACAGACAAGACTTCCAACTCATAGTCACCCAAAATATACCCA
TCCTAACTCCCGCTGTAATAATTAGCCACATTCATTTGTTTAAATAAGCA
AAGATCACTCAAAGTTCCTGAAAACTCCATTATTTAATGACTGTGTCTAT
CAATACCAAACTTCCTAATTCAGAAGGACAAACAAAAGAATA

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>Sequence 302

>Sequence 303

AGGTACCTCCGCATCCCTTTCCTCCCCAAGTGGCTTGAGTGGCTTCAAGC TCTAGCACTGCCTAACAAACAAACAACCTCAGTGACTTGTGATTTCC CCCCAGAAAAATATCTATTAATTATTTCCCAATGGTCTCCACCTCGGCAT CAGGGCACAAGGTGTAGGCACATGCTCTGAT

>Sequence 304

AGGTACTTTAGCTACTCGAACAGCATGCAGACAGGGTAAGAATCACAGAA CCTGGCCGAATACACAGCTCATTCAGCATCAACCACAAGGTGGCGCTGCT TCAATGCTGATTCAGATGCACAGCCCTGCTAGAGACGTTTCTCCACCATC AAGGCTACATTTGCTTGTCCTTTCCAGGCCGGCCAAAAATGCTTTCTC CTTAAGGTTTCAGGTAATACACATATGGCTAACAGTCTATATTGAGAAAG TAAACCACTGAGGCACAGCAACTCCCTACCCCCATCTTAGGACAGACTCT GACTGCACCTGAGAGGACTTATCTCAGCCTCCCTTAGTTAACAAGGCAAC AAAGTGGGGCAGAAAGGG

>Sequence 305

AGGTACTCACATGCTGAGGGTAAGAGGCAGAATTTCTTTTGCTTGTAAGT AACAGGATCTTTTCCAGAGCCTGGGTCTGAAGACCCCAGGTGTAGATGGA ACTTCAGTTATGACTGGATCCGTGAGTTCAAAGGATGCCACTCCCCGCGT ACCTGCCCG

>Sequence 306

>Sequence 307

>Sequence 308

> Page 55 of 990 of Table 4

#### Table 4

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>Sequence 310

>Sequence 311

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>Sequence 312

AGGTACTGCCACAAATTTGCTATCTGGTAACATATGAATGGTTTACTCTC
AACAAGTCTACCGAGACATATTTCCTGTCTTGTTAAGACACTTTAAGAGA
AGAGTCTAGTAATTACACATGTAATGACTTTGCAGTGGCTCACGCCTGCA
ATCCCAGCACTTTGGGAGGCTGAGGGGCGGTGGATCATGAGGTCAAGAGA
TCGAGACCATCCTGGTCAACATGGTGAAACCCCGTCTCTACTAAAAATAC
AAAAAGTAGCTGGGTGTGGTGGTTCATGCCTGTAATCCCAGCTAGTTTGT
AGGCTGAGGCAGGAGAACTGCTTGAACCTGGGAGGCAGAGGTTGCAGTGA
GCCGAGATCGTGC

>Sequence 313

CCGGGCAGGTACGCGGGGAGAGCTCAGGACCTCTGAGAAGAATGGAGCCC
TCCTGGCTTCAGGAACTCATGGCTCACCCCTTCTTGCTGCTGATCCTCCT
CTGCATGTCTCTGCTGCTGTTTCAGGTAATCAGGTTGTGCCAGAGGAGGA
GATGGACGATCAGAGCCATGCACCTGTTTCCTGCACCCCCTGCGCACTGG
TTCTATGGCCACAAGGAGTCTTACCCAGTAAAAGAGTTTTGAGGTGTATCC
TGAGCTGATGGAAAAATACCTATGTGCCGTTCCCTTGTGGGTTTGGACCCT
TTACGATGTTCTTCAATATCCATGACCCAGACTATGTCAAGATTCTCCTG
AAAAGACAAGGTAAAN

>Sequence 314

> Page 56 of 990 of Table 4

>Sequence 315

>Sequence 316

>Sequence 317

AGGTACAATGCCCTTGGAGGGAGAGGGGCTTCATGGAAAATGGTTGCCAT GATAGGATTTGGGGAGAACCTCTATGTTTGAGGAGACTTTGGGTCAGGACC TATCCGTGGAAGCAAAAACTAGTGCCCAAATATTCAAAACATAGTTTGGT GAAAGATCACCTATGATTCTGAACGAAATAGTGTAGATAAAGACATCTTGG AAGTTTTCCTATTGAAAAAAAAGAAAGTGTGAAATCAGATACTTTTGTTTT TAAGGCTCTCTTTCTTAAATTTCCTAACTTGGCCAAAATGTCAATGGTAC CTGCCCG

>Sequence 318

CCGGGCAGGTACCATCGCCCTTTCCTTATCTATTGCAAACCCAGAGTAGG
GAGACAGGGAACCAGCAATGTCAGAAGGAGCCGATATTTTGCATGGAGCT
AAGGCTTCTGCTCATCATTTCTCCTCTAGGAAGCAGGAAGCCATTGAAAT
CCATCCCTAATGTATCCCAAATGTCCACTTGCTGAGGGCAGGATTGCACA
AGCAACAATCTTTTGCTCATGAAGCTTAGGGAGCACTGTCCCAGGGTATC
AATTGGCCCAAAGCTGGTCTCTTCCTACAGACCATGCGGCAAATCAGAAC
ATAAGAGGACTTGAGGCCCACAGCCCTGAGTTTCAATTCCAGTTCTGTAT
TTTAGGTCTGTGTTCGTAATTAGTATCATAACTGAGAAGGTTATTT
AGATTTATTGAGCCTCTTTTTTTGTAAAATGGACTATTCATATACAACTGC
AGAAAAACCAAATCCCCCCAAAAAACCCTTGCTACTTAATAACAAAAACCT
AACTGCAAGCACTTCTACTTTGCGTGGTTGACAGAATAACCCATCACTAT
CACCACCACAAAACANACACCCCAGATCCGTGGTGGTATTAAAAGAGAAATGCT
GGAATCTCTGCN

>Sequence 319

CCGGCAGGTACTTAGGACTATGGAGAAACAATGGAAGACATTAATTCTG
CTTGTCTTGATGGTAAGGGTGGGGATGAAAATACAGATCGAATTTTGGGGG
AGCATGTTAAGGTTAGGGGAATAGAGATAGCTTATATTTAGAACAAGTTA
GTAGAGACTGTATGATTTTCCAAATAGAGAAGGGTAAAAAGACATTCCAT
AGAGGAAGAAAATTACATGCAAAACCACAGAGACCTTAGTTTATAAAGAG
TAACTGGGTATGGCCGGGTGCGGTGGCTCACGCCTGTAATCCCGGCACTT
TGAGAGGCTGAGGAGGGTTGATCATGAGGTCAGGAGATCGAGACCATCCT
GGCTAACACGGTGAAACCCGTCTCTACTAN

>Sequence 320

> Page 57 of 990 of Table 4

#### Table 4

CTTATGTTCTGATTTGCCGCATGGTCTGTA

>Sequence 321

AGGTACCTGAGGCTCTGTGCCAGTGGGGATGACGGGGGCTGATGTCTCTT CCCATGGGCTCCTATGGATTTGCCCTTCAGATGACCTGGTAGGGCTCTGA GTGACTGACTTAAAGACCTTCGTAACGCCAAAGTGGCAAGATTTTGGAGA CAGATTTGTGTCTCCTCATCCATGATTTTTGACTTTAATCTTTTCTGAGA AGACCAGAAATCAGAGAGTTTGTCTTCTCAGCCTCTCTGTGCAAGGATCT GCTGAGCTCAAGCTTCCCTTTTCAGCGTCAGCTTTTTAAGTTGAGAATAA TAATTAAAGAAAACTCCAATCTCAATTCCAACATCAAGTGTCCATGAAGC

>Sequence 322

CCGGGCAGGTACAGTAGTCACTCTTGTCACAGTGGTTATTGTATCAGACG
ATACAGAACATGTTAATCATCATAGAAAGTTCTGGACAGTGGTGCTCTAG
AGTCTCAACATGTCACGTGTTCGGGGGATCACTGGATCTAAAGCCATTCC
TTATGGGAAATGTTGGCTTTCTTGAAAATACACCGGAGACCAGAGAAGGT
CACCATGTGGAGAAGAGGCAGCCTTCACTCTGCCAAGAATGCTGGCCAGG
CTTCTCTGTTTTATATCTCATCACAATGAGGGCCATTCTGGCCCTCCAAA
ATATGGATACCAACCTTTACGCACTGTCAGAAATGGGCCACAATTAAGTG
TC

>Sequence 323

AGGTACCAGAGTCCATGTTCTTAAACCATTAATCTACGATGCCTCTCAAG
TAAATAGTCAATTAGTGGTAGGTGTGAGGCTGTAGGAAAAAGAGGAGACG
AAGGGACAGGAAAGCAGTCCTCATTGGAAAACTAGGTTTCGACTGGCACT
GTTGGACTGGGCTGCAGTTTAGGTCCTCCCACTGCTGAGTTCCCTCACTT
CATCTCCTGGTGCTTCTGGTTTCCCATTTATAAAATGCAAGGGAAGGATT
CTATTTATGTCACAAGGTGCATCTAAGGAGTAAAAAGTCACGTCATGTTT
GACCAATGTTAGTCAGATCAAGATTTATTTTTAGATAAATTATCTGTTAGT

>Sequence 324

CCGGGCAGGTACAAGCAGTAGGCTGAACTCATGTGCCAGGCAGAGGTCTG
ATGAACACCACCGCCAGTCCACCGGCACTGGGGTCAGTGTTTAGCGGGG
ATATGTGGTGCTGTTTCCCAGAGTGCAAAAAGGACAGGGAGGCCCTGTCA
CATGAATGCTGAGTCAAATTTATATATATATAGAAACAAGACATTGCCTGGC
AGGGAAGATGAGCCATGTTAGTGTGGGCTGTGCCACCACTTCACCATTGC
ACTGATTACATTGTCGCACAGATAGCTACTGCCCATAATCCTGTCTCCTG
GCTTAAGTAAGTCAGAAATCACTGCTTTATAAATGAATTCCTAAGGTGGT
TAGCAATG

>Sequence 325

>Sequence 326

>Sequence 327

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#### Table 4

AGGTACTACAAAGATCCTGGGGAGCCTGTAGGTGACACGTATGATTTGCT GCAAGAAATTTCACAATTAATAACAATTCTAGGTCTATATGGTTGATTTG TGATAAAAGTCACCTATGGCAAAAACAAGAGAAAGTTGTAGGGAGTAGT TTGGGAAGTGGTAAGGTGAGCAAAGGCAGGAATCTTCTGGACACCAGGAA TGTAAATTGGGGGAAGAAAAATATTCCAAATTTTCTAGTCATTGAGGAAC TGCCAATAACATTAATTATGAATCATCTATGTGAGCTGTAGAATGGTCTT TTCTGTGTTTGTTCATCCATTCAATAAATACATACTGGGGGTGGCCATGT GCCA

>Sequence 328

>Sequence 329

AGGTACTCACATGCTGAGGGTAAGAGGCAGAATTTCTTTTTGCTTGTAAGT
AACAGGATCTTTTCCAGAGCCCGGGTCTGAAGACCCCAGGTGTAGATGGA
ACTTCAGTTATGACTGGATCCGTGAGTTCAAAGGATGCCACTCCCCGCGT
ACCTGCCCG

>Sequence 331

>Sequence 332

AGGACACAGTTAACCACAAAACAGGCCTCTCTGAAAAAAGCCATTGCCA TGGACTGCCAGACAGACAATGACAAGACACAAATACCTTCTGGTGTGTGA GCCACGGGACATGTGAGCTTCCCCGCTGATGCTCCTCTTATATCAAAGAT CACTTTCACAAGATGAGCGACTCAATATCTTTTATCAAACCAATGATCAC CTGCAAGCTATGGTATATTTTTGCAGCTGTGTAGAGCTATGTGGCATGAG AATGTGGGACTTATAAATTGCTGATCCAATAAATAGACATTATGGGCAAC AGTGTCTTATCAGCTAGTGTGTACCTGCCCG

>Sequence 334

CCGGGCAGGTACTTAAGTGTCCCACGCAATGGGTTGGGCCAGGGAAAGCT

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#### Table 4

>Sequence 335

CCGGGCAGGTACTCTGCGTTGTTACCACTGCTTTCCCGCGTACATGCTGA
TATAGGGACAGCTTAGAGCATTAGGGAGCTGCTAAGAGAGAAGAGGGCTG
GAATAGCAAGCCAAGAGTTACGTGGGCTCAGAGGGAGGAAGCCCTCC
CAGGTGGCAGTCTGCGAAATGAGGAAAGGTCCCATAGAGAAGATGTCATT
TGAGCAGATCTGTTTTGATAGACAGTATTTAGATGCAGCCTAAACGAAGA
GAACTGCATGGGCAGAGACTCTGAGGCAGGAAAGTACCT
>Sequence 336

CCGGGCAGGTACTTTTAGTAGAGACAGGGTTTCACCATGTTGGCCAGGCT GGTCTCAAACTCCTGACTTCAAGTGATCCGCCCACCTCGACCTCCCAAAG TGCTGGGATTACAGGCATGAGCCACCGCAGCTGGCCAAGGCAGAGCTTCT TATAAGGTGAGAGGAGTAAAAGAGGAGCATGTGTAGGTTGAAAAGGTGCA CAGGTGAGTGTTCACTGACACACACTCTTATCCCCTGAAAAATATTTAA AATGTATATGAATACATCCCAGGAAAAAATAAATCAACTCATCACTCTG AAAATCCTTCATCTCACTTAAAAAATGACACCACGCTGACTCTACATAAG ATTAAAACAAAATG

>Sequence 337

AGGTACTGGAGGTCCGAGCTACCACAGAAGACAACAAAAATCAATATAAG
GTATAGGAAGATTGGAAAGAAAGAAAACAACCACCTAGGCTGAAATCCC
AAACAACTGGACACGCAAATTATTAAAGGTGATTTCATAAATGTTATGT
CATTTAAGACAGCCATATAAAAGGAATCATTATTCCCATTTTCTCTATGA
GGAAATAGAGGCTCAGAAAGGTTTTGAGCAACTTGCCTGAAGTTGAAGTC
CCCCCAGCATATAAGTGCTGAAGCCAGAATTCAAACCAATTGATAATTT
CAGTGCTCTTCACCGTAGACCACATGACCTCCCCTCAGTTAATATTCACC
CGTTTTTGCCAGTGG

>Sequence 338

AGGTACCTCCGCATCCCTTTCCTCCCCAACTGGCTTGAGTGGCTTCAAGC
TCTAGCACTGCCTAACAAACAAACAAACACCTCAGTGACTTGTGATTTCC
CCCCAGAAAAATATCTATTAATTATTTCCCAATGGTCTCCACCTCGGCAT
CAGGGCACAAGGTGTAGGCACATGCTCTGATCTTGCACCTAGGAAACCGT
CATTATCAAGGGCATCCCCTAGTCCACTGTGCTCCCCGGTAAGTACCTGC
CCG

>Sequence 339

>Sequence 340

AGGTACTCTAAGACTCCTAATCCAGGCCAATTCCTAGTGGACCAATAACA
AAAAGCCCAATTACCTTCTTCAACTACACTTAAAATCATAAAGCTTCAAA
GATGCAATGACCTAATACAACCCACCTTCCAGTTTTTGGAAGCACTGTGCT
CCATGCAATATTCTGCGATGGTCAGTCTAGTATAAAAGGACTTCCTGGAG
GGTCTGCTCCAAATACTAATGCAGAGGTCACAAATTGGTGGCCCTCAGGC
CACATTTGGCCCATTAAAGTATTGTTTTATTTGCTTCATAGTCTTTAAAA
AAAAAACTCAATTAGTCATCAACATTTACAGAATAAAGATGTCACATAAA

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**AATTTGTGTTACTAGCTC** 

>Sequence 341

AGGTACTACAATTAAACCGCAGCCCATCTCCAGATATTCAGACCATTTAA
TCTCCAAATAGCAGGCATTTAACACCTCATCTGTGACCTGGGGGTTGACA
GAACCACCTAGGACTCAGGACAGATAGCAGGAAAAGAGGTAACACTTAGG
TAACACCTTCAGCTTGTCAAATTGTATCACTGTTCATCAAAGGGAAACAC
ACACATGTAGCCATGAAGTTTGAAAGGCATCCTGGACTACCTCTGTG
GAAGAAGAGGGCTTGCCAGGGTTTTCAGAACCCGAATTTGTGCTGTGGCTC
TGTGTTGTGATTCTAGAGGGTTCTATAGTCCTAGCATCCCAGGGCCTGAG
GCTTACTAGACATTTCC

>Sequence 342

>Sequence 343

AGGTACACAAGGGTTGGCCTGAGTCCCTGTGTTGTGAAAGTTGGCCTACA AAATGAGTCCACAGGGACTGTCATGGGTTTTGAGTTTATGGAGGTTTGTC CATTGCTGGAGTCTACTGGGATGAGCCTTGGTCTGCTGAGCAGGTATGGA ACCTGAGTCTGGGGAAGTGTGGGGCCATAGAGGTCAGACTGAAGGGTAGG GTTATGGGGACTAGCCTAGTACCTGCCCG

>Sequence 344

>Sequence 345

CCGGGCAGGTACGCGGACCCACTGTGCCCAGCCCTTGAATTTCTCCTAG CCCTTCAGTTCCTCAAGCTTCATGCCTCCCAAGGTTGCACCCCCCATGGC CTGTCCTGCAGTCCTGGGGCCCTTCTCTGAGGGGATGAAGGGGGCACTTC CCTGAACAGAGAAAAGGGAGACCCACACCACTTGGATTAAACTCCCTGG GCCCCAGCTGGCTCTGCAACTTGGCCAAGAAGCCCTATCTCCTAGGGCCT CAGTGTCTTAGTCCGTAAAATGGTTCCTGAACTTTTAAAATACAAACACT CTTTTGTAGAGTCGAAACACTTTGCAGACCTGCACTCTGTGGCAGTACCT >Sequence 346

>Sequence 347

GGGGCCATTGAGACTGCCATGGAAGACTTGAAAGGTCACGTAGCTGAGAC
TTCTGGAGAGACCATTCAAGGCTTCTGGCTCTTGACAAAGATAGACCACT
GGAACAATGAGAAGGAGAGAATTCTACTGGTCACAGACAAGACTCTCTTG
ATCTGCAAATACGACTTCATCATGCTGAGTTGTGTGCAGCTGCAGCGGAT
TCCTCTGAGCGCTGTCTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTG

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## Table 4

GGATGTCCCTGGACAAGAGACAAGGAGAAGGCCTTAGGATCTACTGGGGG AGTCCGGAGGAGCAGTCTCTTCTGTCCCGC

>Sequence 348

AGGTACCACCATGCCTGACTAATTTTATTTTTTTAGAGATGGGGTCTTG
CTATGTTGCCCAGGCTGGTCTTGAACTCCTGGGCTTAAGCAGTCCTCCA
CCTCGGCCTCCCAAAGTGCTGGGATTACTAATAGGCATGAACCACAACAC
CCAGCCGGCATATCTGTATTTTGGTTGCACGGAGGCTGCTGCTATAAACC
GTGGGCACCAGTGCCCACGAGTCATACATAATTGCTGGCCCCCATGGCTG
GAAGTATCTGAGGGAACCTCAGGCAAGGCCGTTTCTTTTCTGGAAGCTCC
AAGTTCTGGGTCCTTCTTAATAAATCTTCTCG

>Sequence 349

AGGTGGGAGAATCACCTGAGCTTGGGAAGTTGAGGTGCAGTGAGCTGAGA
TCGCACTGCTGCATTCCAGCCAGGGTGATGGGAGTGAGACCGTGTCTTAA
ACAAATAATAATTTTGGGGGTGATGTAGACAGAAATAAGGACAGAGGT
ATGAAAAGGAATAATTATTTAGCATTTTACTAGCCAGAGATTTTGGGCAGT
CCCAAAAAGCAGCTTTTCTAATCTCCCTCTCCTTTCCCAAAAAACTTTAA
TCAGATCCAGTAGTATCCTATCATCTTTGGGTTATTTACATACTACTTTT
TGGAGGGGGGGATTGTGGAAAGCTATCGAGATCTT

>Sequence 350

AGGTACTATGTCCCTCTCAAGTCCTGAATCTAACTTAGGGAGTAGCCAGG AGACTATGAGAAGGAACTACTCCAGGGAAAGAACATCCCATGCCCTTTCT GAAACACAAGTGGCAACCATAAGACACCACTCTTTATCCTACCTTTTAGC AGACTATGCACAGTCCCAGGAACGAGGCCAGAACTGATAAGCAAGTGTGG CATTGGCTCCAGCCAAGGTTATGGGATTCGGGAACCTCCCCATCCTGGAA TTGGGCTGGGAGGGGTTTCACCTGGGAGCCACAGTTTTATGGCCTGGGGT TATATTGCAGTCCAAAGACAAA

>Sequence 351

>Sequence 353

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## Table 4

>Sequence 354

AGGTACTACGCCAGATGCTGTTTACACATAGAGTTTTTGAGCTGTTTTCTCA
AGGAGGGCATTGGTGGCATTTGGGCAGAATGATTCTTTGATGGGCAGAA
AGGTCCCACCCTTCGCAGAATGTCTATCACTAAACTGCAATCATTCTCGC
CAATCTTTAGGGTGGATGGGAAGAGTAATGCCCAAATGAGAGCCCTCCCA
GATGTTCAGAGCAGCGGATATGAAGTCATACAGCCGGGTTTTGTTTTTAT
TCCATCCATTCCTCCTGGGGACCTTAGACAAGTGATAATGCTCTATGC
TTCAGTTTCCCCCCTTGTAAAATGGTGGTAATTCCCGCGTACCTGCCCG
>Sequence 355

AGGTACTACGCCAGATGCTGTTTACACATAGAGTTTTGAGCTGTTTCTCA
AGGAGGGCATTGGTGGCATTTGGGCAGAATGATTCTTTGATGGGCAGAA
AGGTCCCACCCTTCGCAGAATGTCTATCACTAAACTGCAATCATTCTCGC
CAATCTTTAGGGTGGATGGGAAGAGTAATGCCCAAATGAGAGCCCTCCCA
GATGTTCAGAGCAGCGGATATGAAGTCATACAGCCGGGTTTTGTTTTAT
TCCATCCATTCCTCTCCTGGGGACCTTAGACAAGTGATAATGCTCTATGC
TTCAGTTTCCCCCCTTGTAAAATGGTGGTAATTCCCGCGTACCTGCCCG
>Sequence 356

>Sequence 357

NCTGGANGTTNGNANNAACTGACCTGANNNGGCCTCAANNCTTGCTGTGA ACTAGTCACGTGCCCAATGATAGTTCTTCACCCAATGCCTTCAACCTTTC CTTCCTCACACAGTGACGTGAAAACAATCAGNATGTAACCTTGTAGCCCT TTTGGNTCGTGTGAATCNNTGTAACAAACCCCATGCCTTTTAACCATGAC TNACCCACTGCATTTCCANNACAACGCTTTATGAAACAGAAAAGTTCTCC AAGCATACCCCTGAAATTCTTTTAGACAAGAAAGGTGNNNGTTTAATAAT GGTTATGATCTCAAAAAAGAAACANNNTAAACATGTTGGGTCCAATATGA AAAAAATCAAAATCCTTTCGAAGTCACTGAAGACTCTTGGGCTTGGTGGA AAATCGAAAATAAGCATCTAAATGAAATTAGCACCCAAAATTGAATTATT TATAAGGCCAAGTTTGGGAAAAGAAAACCAAAGTGGGACTTTTACTTTTC AACGATAAACTAAAATCCGAGGATAATTCATTTCTTCAACAGACTGGAGG AAAGAATCCCTGTAAAACATTGGAGTTCACCAATACCCTAGAATTTAAAT TCTTGACTGGTCTTGAACAAAAGGTAAAAACATTATCATCTTCCCAACCC TTAGATTTCCTCATCCTGTAGAGGGAGGAATAATTGGCCCAACCCTTTCT AAGGTCTGAAAATGGTTGTGAGTCCAAATGGGATAATTTATGTTGAGGGT

>Sequence 358

CCGGGCAGGTACACATCTGCTCCTGGGCAGACCTTACAAGTATCTCAAAC
TCATATCTCCATGAGAGGTAGATAAGCTACGTAAACAAGGGAAGCCAAGA
TAACAGGGAAGACAGGAGACTATCTGCCTATCTAAAAACACTCAAATTCT
TTTCTATAAGCACTGCTGATTTAATCCATTACACCACCAGCAGCTGCCAG
TTTACAATCTCTGCTACACAAGCCCTCCATTGAGTTTAAAGACAACCGTC
AAAATATCTCTCCAGTTTCTCCATTCACCTGACTGTTACCATAGAGAATA
CAGGTATTCCCACTCTGGCCAGCTGTTGCAGTTTTCTCCTATCAGAA
TCCAAACCACCTACCAGTCCCCGTACCT

>Sequence 359

>Sequence 360

> Page 63 of 990 of Table 4

# Table 4

>Sequence 361

CCGGGCAGGTACAGGGCTGGATCCTTCCCAGCCAGGGTGCCTGGGATTAT TGGCTTTCAGCAGCCGACTCACGGAGGCCTCCTTTGGGCTAGGCACTGGG ACAGACCCCTGCCTCCCCAAAGGCATGAGACCCTGGCCTGCCATTTGGGA GCTCAGAGCCTGGCTAGAGGCAGGAGAGAGAGAGAGACA CAGATGGTGAATGTGGTGAGAAAGGAAGCATGAGGGGGTGGGCATGGTGC ATGGGAGAACAGAGGAGGCGATGGAGGAGTCCAGGAAGCCTTCCTGGGAG GCGGTCGCCTGAGCTGAGCCTCAAGGAGTATGAGCAGCTTCTCAACAGGA GAAGAGAGTGGAGAGCACTTTGGGCAGAAAGTTACAGGCAGAGGGAGCAT TCCAGGCAGAGGAGCATTCCAGGCAGAAGGAGCACTGCAAGGAGAGGGT GCACTCAAGAAGCAAGGGCACTCAGAGAGAGAGAACACTCCAAGGAGAGA GAAGCAAGAGGTGCANGGTGCACTGCAAGGAGAGGGAGCACTATGGGGAA GAGGTGCACTCAAGGAGGCAGGAGCACTCAGAGAGAGAACAATCCAAGG GGGGAGGAGCACCCAGGGAGAGGGAGCACTCAGGGAGAGGGAGCACTTC ACGAAGACACTTCAGGGAGAGGGAACAAGGAGGTGCAGGACGCACTGCAG GGAGAGGAAGCACTACAGGGAGAGGGGTGCACTCAGGGAGCCGGACCCCCC CAAG

>Sequence 362

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AAATGAATGAACTTATCCAAAGATTTCAAAGAGTCTACACAAAAATATTTG
CTTTCATGTGCTTGAGTAAAGAATTTTAGTATCTAAGAAGCATAACACCTT
TAACGTTTAAAACAATGGTTAATATATATATATATAGGAAAAATTTTTTAATA
TTCTGTTAAAAACAGCAATAAAAGAAAGAAGATGCCGGGCGCAG
>Sequence 363

>Sequence 364

>Sequence 365

CCGGCCAGGTACAGGGTTTACTCAGTCCTGTTGTGTAATAGGAAGCAGGA
AAGGGCAAGGGCCCTGGGAACAACCTCAGCCCTGCCACTTACTGGTCATG
TAACCCCGAGCAAAATGACCACCTTGAGCCCCAGTCTCCTCTTCTGTAAA
TGGGTATACCACCACCTACTCATAGGCTGCGTGATGAGAAATGGAATAAT
GTCAGGGAGTGCCTGGCATGACGCTGGCACCCTGGAGGCTCCCCAGGAAC
GGTGGCTACTGCCTTCAGAAAAACTGAATCTACTTCAACTTATTTTACGT
AGGCCAAAGCATCCAGTCAGTGAGTAAATCAAGCTGCAAGATTCATTTCT

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## Table 4

AGGTACGCGGGTCACTGGACTGAAAGTTCCCTAAGGCCAAAGGCCATTC CTCTTTGGCTTTCAGTAGTATGCCCTGGCATTTTCTGCAAACTTACCACT TGATGGGTGCTAAAATATGTTTTAAACTGAGTATTGCACCCAACGGATGA AAATTTTCTAAAAGTGCTTCTATCAAGAATTAGGAAACCAAAGTATAGAA GAAGTCCTAGCCACAGATTGGCAAGGACAGTTTTGTGGGGGCAGCCCCAC. ATGCCATAGTCCTCTGCAGGGAGCCATAACTTAACATCCCCATGTTTAAA TTTTAAATTATACCCAGCCCCTTGTTTTGTCCATTACCAGTTGAGAAG TGAGGTAATTCATTCTCCTTTCTACTGCTTCTGCCCATGGTGAGAACAGA ACTTCCATATACATCTTCTCTGCCCAGCTGGAGGGGGCTGATGGAAGACA CAGCTTCTGTCATCCAGCGCCTCCCCTGGGAGTCTCTNTACTGATTGGTC TTTAACAGAATCATGGTCTCCAAGTTTCACTTCACCTTCTGTCCTCANGT GTGGCAAGTGCCCTGGCCAGAACCTGCTATTCTCTCCGGCTTCCTGTTTC TTTTGTCTTTTATCTACTGTCTGAAAAATGAATTGAGTCCGGGAGAATGG AATTTTAAATAAAAAGGCCCGCTGGGCGAATGGGTCATGCTGTAATCCC >Sequence 367

ACGTACAATGGCTTCATTATTGCCAACTTGGAATAAGAAGTAGCAGAGGC TCAAAATAGTAATGTGAATGCTCAATGTTACATAATAATTCAATGGCGAG GCCAAGATTGGGATTCCAATTCTCACATTTCTAGCCACTGCTCTTTTT ACACAATAAAGATGGGGAAAAAACATTTAAGCAAGTTTGACAGGAGAGTG CCCTCTCCACCAACAAAATTATTGAAGCTCAAAAGTTCAGGGATTTGCA GAGACCATTCAAATGGGAAAGGGCAAGTCTCTTCAACATGGTGGTGGAAA AACTGGATATCCACATGCAAAAGAATGAAGTTGGACCCTTACCTTATACC ATATACAAAATTAATTCAAAATAGATTAAAGATCTAAACAGAAGATCTA AAGCTATAAAACTCTTAAAACACAGGAGAAAAGCTTCAGTGACATTGGAT TTAGCAATGAATTTGTGGATGACACCCAAGGCACAGGCAATAAAAGTAAA AATATGTTACTGGACCCATACAAAAATAAAAATTTGTGCACTGGAGAAAC AACCGAGTGTAAAGCGAACTTCCTATGGGAGAAAATTTTGCAAATCATTA TCTGATAAGGGATTAATTTCCGAAAATTTAAGAAAATCTTAAGCTCACCC ACAAAAAACAATTTAAACCGGGCCAAGGACTGATTGACAATTCTTCAAAA AAGTGTACCTGCCCGGCCGGCCGGTTTTAACTAAGGATACCCGGCCCGCCG >Sequence 368

>Sequence 369

> Page 65 of 990 of Table 4

#### Table 4

>Sequence 370

>Sequence 371

GGTCTTTCAATGGCTGTTTATGAGTATACAACAAGTGCTTTCTATATAC >Sequence 373

>Sequence 374

>Sequence 375

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## Table 4

TGGCAGGGCCCTGCCCTCAAGGAAATGGTGGGGGTCCAACAGTATTCACT GTTGTAGAAGGTACCTGCCCGGGCGGGCGGCCGGCCAGGTACTTGCCCAA CCAACTAACCCATCTGATCAGAAAGTTCACAGCTTTTTGTTGCTTAGGGA CCATTTCTCCAATTTCCCAATTGTTTTTGATGTCGGTCTAAATGGATCCT TAATATGTCTCCTGTAAGAGTCTTTCAAAACATTCATTGCTCTCCATAGG GCCTTTATGTAACTAGGAATAATACCTTCCTCTGGGGAAATACAAACTCT TTTGGGCAAGAGCTGATGCCTTTGAAAAAGAAATGGAAGGNCAATTCCCT CTGGCAGGCCAAGCTGGGGCCCAGATTTGTAGCAGAACACCGG >Sequence 376

CCGGGCAGGTACTTCCTCTACTTTCTGATAAGCTTTAAAAGAAAAAAACT AAACTAAATATTTCAAAATCAATGGACTTCAAGTAATCCAAGAGAATTTG GAAAACATTTCTCTAAAAACTAATCCAAACACAAGGTGTCAGTTTGGAAA TAACGGAAGCATATTTCGTTTTAAAAATCTAAAACATTTTAAAGACAAAA ATTCAAGTTAACATCCCAGTGATTAACTCTGGAACTGCCTAGCCAAAAAC AACTTTCGGCACTTAAAACATAAAACTGTCAGTTTCCTCTGCTTGGAGAC AAAACATACAAAAAGCAAACATTCACTGTTATATTTTCCTAGACATGAAA GATAGAACTAACTTTCATAAAAGGTGATCACTCTGAGTATTTCTACCTGA TATGATATTCATGTCGTAGCTCCTAAAAATCAAGTACAAATTCCAAACCT CAGAACTATCCTTAATAGATGGCTACTATTCTAGTTTGCGTTACTCCCTC GACTTGATGGAAGTACCTTC

>Sequence 377

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>Sequence 378

AGGTACTCGGGAGGCTGAAGGAGGAGAATTGCTTGAACCCAGGAGGCAGA GGTTGCAGTGAGCAGAGATCATCGCACCACTGCACTCCAGTCTGGGCAAT AGGGAAATTCCCATGCAACATTTAATGAATGCCTTCAGTGCTGTTATAAT GCATTAATTTCTATGAGAAATGTTCTCTCTTTTTTGTGCCTTTTAGGAAA ATTGCATTTTGGTGATAGAAGATAAAAACTTGGCTAATTAGGCCAGGCAT GGTGGGTCATGCATGTAATGATATGGGAGGCTGGCATATCACTTGAAGCC AGGAGTTCGAGACTAGCCTGTCCAACACAGTGAAACCCCGTCTCTACTAA AAATACAAAAATTAGCTGGATGTGGTGGTGGATGCCTGTAATCCCAGCTA CCTGGGAAGCTGAGGCAGAAGAATCGCTTGAATCCAGGAGGTGGAGGTTG AAGTGAGCCGAAATCACGTCACTGTACCTGCCCG

>Sequence 379

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>Sequence 380

>Sequence 381

CCGGGCAGGTACCTGGCCTATTCCTGGCTTTGAAAAAATGGTTTTCGGAC
ACTAAATCTTTATTATAAATCAAACACATTATAGTTGCTTCTGGGAGAC
TTTTGCCTTTTGCCCTGCTTACAAACTAGCATCATATTCTAAAATCTCAG
GAACTAAAATTACTCATTGTAATTTCTCTAAAATTCAAAGCCTATTGGAA
TCCCTGCTCTTGTTATGTAAAATATAAATATTCGAGACATTTCACACCAC
ATTTCATTATTCAGCATTCCCATCAAGTGCTGGAAGGCCAGTTCGCTAT
TTTATAATGAACGTGCTGGGTTTGTTCTGAAAGGGCAGCCTTGTACCT
>Sequence 382

>Sequence 383

>Sequence 384

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# Table 4

GCTAATTGTATATTAAAAAGAAAGAGAACGATCAAAACGGGCATAAAAAG AGAGTAAGTTATATTTTTTCTGGGAAAATTACAGGCGAAGAAAGTGTGCC CTGGGG

>Sequence 385

AGGTACCCTGATCATATCAAGGGCCCCATTTTAAAAGGAGACATTCTGAT GAATCAAAAGAAAGATATACTAGGAGCAAAAAAATGTTTTGAAAGGATTT TGGAGATGGATCCAAGCAATGTGCAAGGAAAACACAATCTTTGTGTTGTT TATTTTGAAGAAAAAGACTTATTAAAAGCTGAAAGATGCCTTCTTGAAAC ACTGGCATTAGCACCACATGAAGAATATATTCAGCGCCATTTGAATATAG TCAGGGATAAGATTTCCTCATCTAGTTTTATAGAGCCAATATTCCCAACC AGTAAGATTTCAAGTATGGAAGGAAAGAAATTCCAACTGAAAGTGTAAA AGAAATTAGAGGTGAATCCAGACAAACACAAATAGTAAAAACAAGTGATA ATAAAAGTCAGTCTAAATCCAACAAACAATTAGGAAAAAATGGAGACGAA GAGACACCCACAAAACAACCAANGAAAAATACTATTATAAAAATAGTGT TCTTTTGCCGGGGGGCCCCCTGGCCATTACCCCCCCTTCTTTATAGGAT TATAAACAATTTTGGAACTGGGCATGTGGGAAAAAATTTGGTTTTTTTGCC TGGTTTTACCCCCCAAAAAAATTGAAAATTTTTTGGGAAAAAAATCTCT TATGGGAACCAGTGTATTTTTTTGGGAAAACCCCCCAAAAAACCCCGCC CCCCTTCGGTTTTTTGAAAAAAAATTTTTTTGGTTTTTTGGAAGAACCC CCCCCAACAACTTCAAAAAAATCCTGGCCTTTTGGGCAAAATTAAATT >Sequence 387

>Sequence 388

CCGGGCAGGTACACTTGTGAATGTTATGGAGCTGTTGATAATGACGGAGA
AGTGGCCCCACTACAATTACATCAGGGCCATGGCTTTTGGAATATCGGAA
GTCACAGAACTGACAATTATAGCTCGTTACCATATTATCCTCGGCTCCCT
TGCTGGAGAAGTCCTTCTTTTTTAGCCCCACTCGAGCTCTTTGTCTTG
GTCATTGTCTCTCCTTCTGAACTTTTGGCTAGATCATTCTGATTAATGAC
AGAGCCCCTGGAAAGCTTATCATTTAACTCTGGATTAAGGCCGCCTGACT
GCACTGCTCCGTGCTGCCTTGCCATAATGTTCTAGCAGTTTAAGTGAGCTA
GATGACTCACAGCTGAAACTACAAAATTTACACCAGTAGTAACTGGTGGC
CTCTGTACCT

>Sequence 389

AGGTACAAAATACTTTCATCAAGAACCAAACGTTTTATTTCCTATTTAGC TGAAGAATTAATACTTTTACAGAAGCAATGAGTGAGCACAAAAAGCTTAT

> Page 69 of 990 of Table 4

>Sequence 390

AGGTACCAAAAGAATTCTGTGTTTTAAAACACCATCCAAAAGCACAGCCC AGTGGTGGGCCACCTCCCCACCCTGAAGTTCTGCGTTACATATAACCTTT CAGGCACAAACAAGAAGGGTGTGGGATAGGGGGGAGGAGGCTAGAGATTTG TCTGCAAGGGCTTTACCATCCACTAAAAGCTGTGTGCAGGACAGAAGCAT CTTTCTCTCCTCACTTTTTGCACGTGTTGAGTATCATTTTGCTGTGTGCC CAGTGGATGTAGCGAGGATGCAGAATCTCCAAGCAGCTTAGAGTCAGAAG GCTGCTTGTCTTCCTTTCTGATTCTTCATGTAGTTCTTCCTGTGTTTCTT AGCATTCTCAGTCATCTTGGATTTTACTCTGCTGTTTATTCCCATATATG CAGATCAGATTACCAGAAGTCTTGGAGACTCTTTTCAGAATATGAAAGAC TTTGGTAGCAAAGAAGTGAATCTCTAAGGCGAGTTGAGTTTGAGCATAGT CACCTTTAAAATGAGATGGCCTTTGCGGACACATGAAAGGGGTACTTAAG CTTACCAAAATCCAGAACTTATTGGGTGGAAAGGTAACCATTATTTGAAA GTAGACCTTTCTTTTATACAAATATTTTTTTTTCAGAACTATTATTATCT TTAAATTGGAAGGGGATAGCTTAACACTAAGTTTGGCAGTTTATTTTGGA AATATGTTGACCACTAAGTTTTTTTTCCATATTAAAATGTATAATACTCT TTCTGTTCTTATAATTAAAGGGTTCCTTGCCGGGCGGCCTTTATAAATTA ATTACT

>Sequence 391

- >Sequence 392
- >Sequence 393
- >Sequence 394

>Sequence 395

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## Table 4

ACTGAAGGAACTCAAAGCTATTTTCTCCTGGGATTCACAGGAACAAGCTC TGAACAGTTGGGTGCCATTGTGGTCTGTAGACTTTTACAGAAAAAGCTCT ACCAGACTGTTGCCTTGAAACTGTTAATCTGTTTGTCATTAGTCATTCCA CCTGGCTGGTTGTTAAAACACTAAATAGTCGTTGGAAAGTTAGGTAGA TTTCATTAAAGCAAGACTTGAAAAATAGTTGCTTCAGGATCCCCAGGAGG CTTTTGCACTTGGGGTTGGGGTGAGGAATGGATATTCATAAGTTCAGTGT GCTCTCCAGACTCCTGGTGTTTGGGCAGGTCTAGGTCTGGTTTGGGCAGT TGGTTGTAATCTGAGTGCCTGGACTTGCCCGGTAAGTTTTGCTGAAAGAG AAGCAAATGTTCCTGAGACTGGAAGAGGAAAAGCTGCGTTTCAAGAGCCA ATTCATAAGTGCATTTGCTGNTTCTCATCGCTATGGGTTAAAAAACTACA TAGGGTGCTTTGCACGTGGTCCTGGAAATGCTTTTCTTATCTCTGTTTCA ACACACCTGAAATTCCATTCTTTCTTTTCTGGCTTAGTAGTTTAAAAATG GGAATTTGGTATATTAAAAGGAAGGAGCTTCCCTTTATAAAGGAGGGAAA AGGGTTATAGGGACCAGGTTTTGATAATTCTGGGCCTGAC >Sequence 396

AGGTACGCGGGACTAATTTTTTTTTTTTTTTTTTACTTAGAATAAAATTCATG
TAGTGCAGTATCCAGAGCACATTAACTGAAGTATTTGGAGACTAGATTTA
ATCTCAGATCTCACCCTTGGTAAAATCATAAGCTTCTGAGCATCAGAGTC
TCAAACTTTTCATGAGAGGGGTAAGTGTAGTTTTCAAAGGACAGAAGGAG
GAAGACTACAGTTTCTTGAGCTTCTCCGATGTCGTAGGTACCTGCCCG
>Sequence 397

>Sequence 398

>Sequence 399

CCGGGCAGGTACTAAAAATATAGCAATGTGGGTGGGCTCCAAGGACTGTT CCTTCAGACCTCAAATCCACATGCTTATAGAAGACCACATAGGTCAGAGC

> Page 71 of 990 of Table 4

## Table 4

>Sequence 400

>Sequence 401

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>Sequence 402

CCGGGCAGGTACAGGCAACTGAGAATCAGAATCCACCCATGGTAACAGCA AAAGCAGCAACATCTAAACGTCGCTGCTAACGTTTACCTCTGATGAAGTT GTCAAAGTCATCCTGCCAGAAACCCCAAAAGTTTGAATTACTAATGTGGC GTAACTCACACATGAAGCAAAATGGGAGAAAATATCAGTTATTTGAGCAT GGAAACTGCTGTATTTGTATATACTCAGCTCAACCAATGCTTTCTGATAA TCAGAGGAGGTGAGAAGTAACTTAGAGAAGCACAGTTCAAGCCAACACAC TGAACCTTTATCACACCTGCCAGAAAGCATTAGGTAGATACATGTAAGGG TGACTGTGGAGCTCATGGACAGGAACTCCTCAATCTGCGGAAACCCATCA AGACGAGAGAAAGACCACAGACGTATTGAGGGTTGGGAAAATCCAAGAGG AAGCAACGGACAGAAGAAAGAAGAATGGAAATAAAGTTTCTGATTTCC TTGTGCTGTTCAAGTTCATAAAATGGACTGGTTCTCATCGGCTTTTATTT TTAAAGGGTTCTCTTAATCTGCTATAACCCTTCAATGTTGAAGCTTAGAT AAAGCTGGGCCCTTTGGGCTCACATAAATAACGCAAACCACCAGGAGGGA CCACCCATGTCAACAGTTTCCAATGTCTACTTTAGAACTTTGGGAAAAG GGGAGACCGTGCACCTATGAGGGGCCTGGCATNTTATCTTTCCTTCCCAT TCCCAAAAGAAACAGGG

>Sequence 403

CCGGGCAGGTACGCGGGATATATTCAAGGTATACGATGTGATGCTAGGTG GGGATGTAGGGTTTGGGAGAGAGAGAGACAGCATTGCTTAGATCAGTCACG TTCAGAGACCTCTTTACATAATCTTTACTTCCATCACAGGTGCAGATAGG TGGCTTCAGTTCATATCTCTTCAGGAATACACACACAAACTGGTGGAGAA GAGCAAAGGCATGCTGAGCTGGAGCCCAGAGCAAGGCCAGACTCACTGTC CAGCTCTTTTCTCCTTTACTCAGAGAGGTCTAAGAGAGGTGTGGCTCTTT CATGATTGGGCAGAATGATAAATGTTCAGATGCCATGGACTTTCAGTATG GTTCACAAAGAGTGGAAACCACAAATGATAATCTGTGAATTCCAAGCTAC TGTATTATATGGATATATGAATATAGTTTATGAATATATATAAACAAAA ATAGGATCATACAATGATGTTTTACAGCTGGCTCTTTCTCAATTAAC CATTATATAGATATACCACAACCTCTAAACTATGGCAGTGACCTGTGAAC AACCTGGATTTGAACTGCATGGGGTCACTTACACATTGATTTTTAAAAAT AAATATATTGGAAAATTTTTGAGATTGGCACAATTGAAAAATTCTCAATG AACTATGGACCTTGNAAAAAAAAAAAAAANNAANNNNGGGCCCTGGGCGG TTTAAACTAAGGATCCCCGGGCG

> Page 72 of 990 of Table 4

>Sequence 404

CCGGGCAGGTACACGGGGGGCTGTTGCCATGGATACGCTTTGTGTAGCGG CTATGGGCGCTGTCTTACAACAAAGCCAAGGAATCTCGCTGCTGAGGGCA GTTCTGTGCTTTATTATGAAGAATAATGGACGATGATGATGCAAAGCTCA AAGCAGAAATAGAAGCTGAATTGGATAAACTCAGCATTTCCTCCTTGGAA AAAGAAGACAATGAGAGTGATGCAAAATCAGAAACCCAGAGTGATGATAG TGATACAGATTCAGTTGAATTACCAGAATCAGTTCTTCACTGTATTAACA TCATAAAGAACGGGAGTAAAGCTGTTGAAGAGCTCATTCTTCAGGACCTG GAAGATACTGATTTTTAAGCTATAGTTATGGAGCAGTTTCTAATAATCA TATGCATTTAAGAACAGGACTATCAACTGAATATGAAGAAAGTTCAGAGN CATTAATTAAGATATTATCCGCNAAAAAACCGNNNNAAGGTTCCTTGGCC CGTT

>Sequence 405

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ACACTTGGTGAGAGGCCCATGAGGACAGGTGATGCTTGGGCTTATAGCT
CTGACTCAGGACATCACTGCTCAACAGCCTGAAGCCCACATCCAAAGCTC
ATGTCATGCTGGCAATTGAAGGGGTAGCAGAGCCCAAAAGTCCAGAGGGG
CTCATCACAGGGAGCAGATGTCTGTGAGCAGGAGAGACAGCGGCTGTAGG
GATCGATGAGACTTGGTAAGCATGATGTCCTTTGTCAGCATAGCATCTT
TGAGCTCACACAAATAATTGATGTATAATTGTCCATTTCAGTAAAGGAGTTT
CCACATCCACTATCTTACACGATTCTCACAAGGGCCTTGAGTAAATATTA
CCTGCATGTTATGGTGAGAAAGGGGTAGTTTAGAGAGCTGAAGGGATTT
GGTGAACGCCACATAATGAGTTAGCCTGAAATCAATGACCAGACCCCCAG
GCTTCTAAATGTTAGCTTGGGCTTCTTGTTTCATGGGACTATTAACATCC
CTTTGACCTGCCCGGGC

>Sequence 406

>Sequence 407

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>Sequence 409

>Sequence 410

>Sequence 411

>Sequence 412

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>Sequence 413

>Sequence 415

CGTTATATTGGACGCCGCCTNTGGCCGTCAACTCCTGGGGTCAGTAGCTG
>Sequence 416

>Sequence 417

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### Table 4

AGGCTAGCCCAAATTGTTGCTTTACTCCCCAGAGGAAATGGGGGAAAGGT AAAAACCTGCT

>Sequence 418

AGGTACATTTCACGGAGGTGGGACCAAAAGAGGAAAGAACAAAATCCCCT AAGTGCCAGCATGTTGGGAATGCATCATTGCAATAAAATTGTGAAACTAA TACTGGCAGGCAAACAACAAAAAACAACAACTGCCACAAACTGCAATATG CTTATCAGGGTCTGAACCAAGAAGAAAGGCCCCCGATCTTTCACAGAGGA CACTGGCACCAGTCCCAGGTCCTGCAACTCTTGAATAGCTCCATGTGCCG TGTTCTCTTCAGGTACCTGCCCG

>Sequence 419

>Sequence 420

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>Sequence 421

>Sequence 422

CCGGGCAGGTACTGGTGACTCACCATTCTGCCAGCAGCCACTTTGCACTG GGCACCAGCACATACCAGCCCCCATCAGGAAATGTGCACAGTCCATCTCA TCTTGTTTCATCTTCATTTTATTAATGAGGAACTGAGAGTCCAAGAAGGT TCAATCATTTGCTCAAGGACAAAGAAGTGCATATCAACTCAAGATCTGAG CGACTCCAAAGCCCAAGCTCTGTGCCCCCGATAACACTAAAGGGCTCTGG AACCTTCCCTCACTGTGCCAAATTCTGGTCGCCACACTTTAGGAAAGGTA CCT

>Sequence 423

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TCTCAGATCTCACCCTTGGTAAAATCATTAAGCTTCTGAGCATCAATAGT
CTCAAACTTTTTCATTGAAAGGGGTAAGTGTAGTTTTTCATAAGGACAGA
ATGGGAGGAAAGACCTTACAGTTTTCTTTGAGCCTTTCTCCCGAATGTTC
CTAAAGTTACCCCTGCCCGGGGCGGGCCCGCTCCTTAGAAAACTAGGTT
GGAATCCTCCCCGGGGCCTTGCATGGAAATTTCGAATATTTCATAGCCTT
TAATCCGGATTACCCCGTCCGAAACCCTTTGAAGGAGGTGGGGTCCTCGG

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#### Table 4

>Sequence 424

>Sequence 425 AGGTACCACAGG

AGGTACCACAGGACACGCCCAGGATGTTGGGTTCCTGGTGCTGACCACAG TGCTATGGTCACTCCACAGTCCAGCACTGCAGTGCACAAAGGGTGCCCTT TGACAAAAATGCTGCAGCAAGAGTCTGACCAACTTGAAAAGCAGCAAATC AACAAGATAAAGATTCCTGAGAGTCCTAAGTAGCCTCTACGAAGATACAA AACATGCACACTCACACAGGCTACTGACATGTTTGACCGAATAAGGTGAC TTGGCACCTCTGCTGCCTGTGATTTTCCCCCTGCGACCTGCGAGTGTTAT ATAATAACCCTAAAAAAGCATCCGTCGCCCTTGCAAAA

>Sequence 426

>Sequence 427

>Sequence 428

CCGGCAGGTACGCGGGGAGTGGCATCCTTTGAACTCACGGATCCAGTCA TAACTGAAGTTCCATCTACACCTGGGGTCTTCAGACCCAGGCTCTGGAAA AGATCCTGTTACTTACAAGCAAAAGAAATTCTGCCTCTTACCCTCAGCAT GTGAGTACCT

>Sequence 429

CCGGGCAGGTACTAGACATCTCTCTGAGGTCATGTCACACTCACCATGCC ACCCCATCATGTCCTTATAGATGGGACCCTCCTCTTCTGGTTAACACATC ATCTGAAGATAGCCAGAGAGCCATCTCTAAGCTGTGCAATGACAAGGAGT CATCCTTCATAGAAGACATCTGCCCCCCAAACAGGTCGTCTATACTTGAT GGTGACTTGTTAAGAAGTTCACCCTGTGCTTTATTTCCAACTCAGGACAC CTGGAAAAGGTAAAAGAACCACCATAGTTGTACCT

> Page 77 of 990 of Table 4

# Table 4

>Sequence 430

>Sequence 431

>Sequence 432

>Sequence 433

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>Sequence 434

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### Table 4

CCG

>Sequence 435

>Sequence 436

GGGGCCATTGAGACTGCCATGGAAGACTTGAAAGGTCACGTAGCTGAGAC TTCTGGAGAGACCATTCAAGGCTTCTGGCTCTTGACAAAGATAGACCACT GGAACAATGAGAAGGAGAGAATTCTACTGGTCACAGACAAGACTCTCTTG ATCTGCAAATACGACTTCATCATGCTGAGTTGTGCAGCTGCAGCGGAT TCCTCTGAGCGCTGTCTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTG GGATGTCCCTGGACAAGAGACAAGGAGAAGGCCTTAGGATCTACTGGGGG AGTCCGGAGGAGCAGTCTCTTCTGTCCCGCTGGAACCCATGGTCCACTGA AGTTCCTTATGCTACTTTCACTGAGCATCCTATGAAATACACCAGTGAGA AATTCCTTGAAATTTGCAAGTTGTCTGGGTTCATGTCTAAGCTTGTTCCA GCTATCCAGAATGCCCACAAGAATTCAACTGGATCTGGAAGAGGAAAGAA ACTGATGGTGTTAACTGAACCCATTTTGATTGAGACCTACACAGGGCTGA TGTCATTCATTGGAAACCGCAACAACTTGGCTATTCCCTTGCCCGTGGG AGTATTGGTTTTGAGAGTCTTTTTGTACCTCGGCCGAGGTACCGGGTGGA AAGCACTCCCTGGTGTTATCTGAGATACTGCACAGACCCATCCACTGTGG AGGACAAGTGTGAAGAAGGCCTGCCGCCCCGAAGAAGAGTGCCTTGCCCT CAACACCTGGGGTTGTTTTTGAGACAGGACTTAATAGGTCTGATGGTC ACAGTTGCAGCCTAACTAGACTTGGGCCCAGGAGAACAAGGTGAGGTGGA CAAAG

>Sequence 437

>Sequence 438

>Sequence 439

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# Table 4

>Sequence 440

AGGTACCTCCGCATCCCTTTCCTCCCCAAGTGGCTTGAGTGGCTTCAAGC TCTAGCACTGCCTAACAAACAAACAACCTCAGTGACTTGTGATTTCC CCCCAGAAAAATATCTATTAATTATTTCCCAATGGTCTCCACCTCGGCAT CAGGGCACAAGGTGTAGGCACATGCTCTGAT

>Sequence 442

>Sequence 443

>Sequence 444

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# Table 4

CCAATCATCTGCTCTCCACTGTGTAGGCAAGGTTCTTCTCTCCACTG GCCCTGCTGGGAGAGATCTCTCCCATCTGAAATGCCCTTTGATCCTTATT TCTCTCCAGTTTGTTCCTTAACTTTTTCACCCACTGTGATCTGGTTTCCA TTCTCAACTCTGCACTCAACTGTGCTCACAAGATCCAATGTACCTGCCCG >Sequence 445

>Sequence 446

AGGTACTCAGAGGTTTCCTGGCTCCAGCCATTGCTCTCGACCTCACAGCT ACCCATTGGGCCAAGCCACCTCCAGCTCTCACCTGACTTGCTGCAGTGGT CTCCCAAGAGGTCTCTCCACTCAGTCCCTGCCACCTTCAGCCTGTTCTCA GTGGAGGGGGCCAGAGTGACCCTGTTAAAACATGAGACCTTTCACGTCCA ACCTCAGCTGAGACTTCCCCATGGTTCCTATCACACTCAGGGTCAAAGTG AGAGTCCCTAAGATGAAACACAAG

>Sequence 447

>Sequence 448

AGGTCGTAGACAAGAGGTCCTCCATCAACCTTCTCAGGTGGAAGTCTTCT
TTTAGAAGGATGTTTGTAAACCCTTTTGCATCAGGAATGACAGTCCAATT
CTTTTCTGTCAGTTCTTGTTCCAGAACAATTAGGGTGAGTCATACGGAGT
AACCTTGCCATAAAAAAATGGAATTCGTATGGGAATTGTATGAAGGCCTTC
TTACTGAAAGTCATTGAGATCCTTTAGATGATGTTTTGTGTATTCTTAT
GATTTAAATACATGCAGAAATGAAAGGATGCAACGCAGTGCTAGAAAGCA
ATTTCTCTCTGCGTTTCACTCAGGGTTTCCTGTAGCCACTGCTTCTCTCC
ATCCATGGACATTCTCCCTCTTCTGGTGAGTCGTTCCCCTCTATATCCCT
CAGAGAAAATTCTGAAGACAGGGAATGATTTGACTGCTTTAGGGAATTCC
CTCTGCCTTCGTCACTGTGTTGGGCAGACATTTCATGCCTGAACATCTC

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#### Table 4

AAAAGAGAGTCACTGGCCAGCCTGCACGCAACCATTTTTAAACCAGTGCC GATTTTTGTTGCGGCAGTGAGCCCTGCCATGCATAAAATGGGCCAGGTTC TTCTTTCACAAAAGGCAACCATCATGTCCCTTTTGCTTGAAGGACCGCAA GCAGGGATTGCAATGTGCACATCCCTCAAAAGGATCTGACCGCTGCTTTT TTTTTAAGACACGGTGAAAACGAAATGGCATTCATGACTTTGAATCTTTT ATTGAATGACCAAAAGAAGGC

>Sequence 450

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GATGCAGGAAACAGGGAATGGCTTGTGCCTTACCCCATTCTGATCAGTCA
CTGATGCAGGTAACAGGGAATGGCGTGCCTTACCCCATTCTGATCAGTCA
CTGATGCAGGTAACAGGGAATGGCGTGCCTTACCCCATTCTGATCAGTCA
CTGATGCAGGTAACAGGGAATGGCGTGCCTTACCCCATTCTGATCAGTCA
CTGATGCAGGTAACAGGGAATGGCGTGCCTTACCCCATTCTGATCAGTCA
CTGATGCAGGTAACGGAATGGCGTGCCTAGGCAAGGCTTTGCTTTCAG
ATGAAGCAGGGCTTAAATTTGAATGACATGAGGGCTATTTTATGCCTTCC
TGGGACTCCAGATGGCGCCTCATAGGATCTCACACAAGTGAATCATTTAT
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GGGCTTCGTGCACATTGAATAACAGGCATGAATACAATGGGTGCATATCAC
AGAGAGAAT

>Sequence 452

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>Sequence 453

>Sequence 454

> Page 82 of 990 of Table 4

# Table 4

>Sequence 455

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>Sequence 456

# Table 4

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AAGGCTTCTGCTCATCATTTCTCCTCTAGGAAGCAGGAAGCCATTGAAAT
CCATCCCTAATGTATCCCAAATGTCCACTTGCTGAGGGCAGGATTGCACA
AGCAACAATCTTTTGCTCATGAAGCTTAGGGAGCACTGTCCCAGGGTATC
AATTGGCCCAAAGCTGGTCTCTTCCTACAGACCATGCGGCAAATCAGAAC
ATAAGAGGACTTGAGGCCCACAGCCCTGAGTTTCAATTCCAGTTCTGTAT
TTTAGGTCTGTGTTCGTAATTAGTATCATAATTAACTGAGAAGGTTATTT
AGATTTATTGAGCCTCTTTTTTTGTAAAATGGACTATTCATATACAACTGC
AGAAAAACCAAATCCCCCCAAAAAAACCCTTGCTACTTAATACAAAAACCT
AACTGCAAGCACTTCTACTTTGCGTGGTTGACAGAATAACCCATCACTAT
CACCACCAAAAACANACACCCCAGATCCGTGGTGGTATTAAAAGAGAATGCT
GGAATCTCTGCN

>Sequence 461

CCGGGCAGGTACGAGCTGTATTGCTTATCAGAACACACTAACAGTCTTTT TGATATATTCGCTTTTCCCCTTTGGTTCAGCCGAGCCTGCTGACAGATCA TTCAAATTCAATTGTTTTATGTCTAAGCCGAACAGCTAATTAAAGTAGGG TCTCCTTTTCTCTCTCCCCCCCTGTTCCAATCAGTCTTTTTCTCACA GCAGAATGGCACTCGGAGATTTGTGCATTGTGTCTGGTTTCCTACGGGCA GGCTGACCCAGTGCCTTCAGGGACTTATCAATAGACCACTCAGAAGAGAC ACAGACAGGAAGGAAGAAGAAGAAGAAGAAGAATCATTTT CCAGAATTGAAGGAGCTTCGAAGCCATTTTTTTTTAAGAAATATCGGGA CCTGGGAAAGGTGACAAAGAATGTTTTTTAAGAGGGGTGGGAGGAGGTT CTAATAATTTGGAAGAAACAGTTCCTGTCTTGGAAAAGGAGAACTCCTCC TTGTATTCTTCACACACGGTTGAAAGGTTCGTCCCCTTATACTGTTGCGC AACCGAATGAAAAACTCTTTTTTTTTTTTAGAAACCG

>Sequence 462

CCGGGCAGGTACTGAACTGGGAGGGTTTTAGTCTGATAGCCACAATTTTG
ACCTAGGCAGGAAGCTTTACAGCTTGAGGCAGTTTCATGGTCTGAAGACA
AACTTCTTGTGACTTGCTGCCGGTGTTTGGACTGCAGGAGAGAGCCTCACT
GGGTCAGGAGCACGAGAACAAAGTGGATCCCACTACCACATTCCACCCCT
CCTGTTTCATAGGCAGATCATGGGACCAGGACTACTGAGAGTACCATGGC
CCTCCCCATACTATGACATGCCCTAGAACTTCTCCCGATTAACAAAGGTC
AAGCATAAACTCTATTGTCACCACCACAGCGGGTTCTGACTTTTAAGTGC
TACCTCCTGTCCTAAAGGGTAGGTCTATAAAAGGACCTGTACAACATTAG
GGCTTCTTAAAGAGCACATGAGCTTAGAAAAAGAAGCGAGCTTTGGGATT
GCCTTTAGTTATCATCATGTGCCCAACGCCACCCAAAGCTTCTTCAAGAT
GGCCTTTTGGTCCCAGAGCATCATCATGTGCTCCTTTTGGCTCCCA

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# Table 4

>Sequence 463

CCGGGCAGGTACGCGGCACACTTCTCTGATGCCTCTTGGGCAATTGCTCT
GTTTTCTGTTGCCTTGGAACTATGTATATACCTCTACTATAGCTATCACA
TTTTATTGTAACTGTTTTTCCTCACCAGCCTATCGAGCGGCCGACCGGGC
AGGTACTGTCCGGACATACCCCTTACAAGAAGAAGCATCTCTTTGGCCCA
AATGTTTGTAATTAAGGGTCTAACAAATAATTCACCTGAAATCCATGTTG
TGTGTAGTGGTGTAGCCACTACAGGGACAGGCTGGACCCATGGGCACAAA
GAAGCAAAACAGCGCATTCGAACCAGCACTCCCCTGAGGGATTCTCTGCT
GGATGTGGTGGAAAGCCACGGAGCTGCCTCGTGGCCAGGAACTGGAGTCC
CACTGGTGGTGCAAAGAGTGTATTCTTTTTTCCAGCAGAGACTGCACCAGG
GGTCAGCACGGGGCCAGCTCAGGACACACAGACCCAGCTGGAACTCCAGC
CTGCCTTCTGGTACCTCC

>Sequence 464

>Sequence 465

ACGGCCGTTTTAAAACTCACCCTGAGGTTTAAATG

>Sequence 466

CCGGGCAGGTACTGAAAATATGAAAATTGCTTAGGCCAAAGAATGGGCTT TTCAATAGCACACTGCAAAACTGGGCCCAAGTATTTAAAACATCTCTAAA AAATATCTAGGTTGGCAGGTTTTTATCCCTAGTTTTAACAGTCTGAAAGA GGGTTCGTTACTGAGCACTGGAAGTGATGAAGACAGAGTAGCTACAACAT AGGGGCTGGTAGGCAGCAGAGCCTCACCAACAGCCTTAATTTGTGTGGTG TCTTCACAGGGCAACCCTGGGAACGATGGTCCCCCAGGTCGCGATGGTCA ACCCGGACACAAGGGAGAGCGCGGTTACCCTGGCAATATTGGTCCCGTTG GTGCTGCANGTGCACCTGGTCCTCATGGCCCCGTGGGTCCTGCTGGCAAA CATGGAAACCGTGGTGAAACTGTAAGTTTGTGAATACCAGTCCCTTAGTG CAGCATTCTCGTGGGCTTCACTTCTGACTTCCCCACACTTGGGGAAGGTG GAAGGAAGTGGAAGGGNTTTCTTGGGCCCTTTCTTAGTAGGGTGTTACTT TTTGAGGGGACAGGGGCCCTTATGGTCCCGTTGCTCCCTCTGGGGCTTTT GCCCCATAAGGTCTAGTGTGTAACCCTTGTTGCCTTAGAAAAAAGTGATC CCCCGGGCTGCGGAATTTTTTTTCACACTCTATCCTTCCGAGGACACTCG GGGGGCCTAAACCCACTTTTTGTCCCTTAAGTGAGGTCATTGGCCCCTG TGGAATCAGGACACTGGAGTTCCCTTGTATATTTGTATCCCCTCCCCGCG >Sequence 467

> Page 85 of 990 of Table 4

# Table 4

AGGTACGCGGGATTCCCCAACAAGATGAAGTCAAAATTCCTTAATTATAG AATCTAGGAGGGCTGTGATTTCTCTGAGTAATGGATTATAGCAGAAGCGG TGCTAAGTCGTATACAAGTCTGGGTAATAAAAGATGATGCAACTTCCACT TTGTTCACTAAAACATTTACACTTGGAGCTCTGAGCCACTGCATTAGTAG >Sequence 469

>Sequence 470

CCGGGCAGGTACCCACTCTGTGCCAGGCAATGAACAACATGGGCAAATAG CCTACCCTCATGGAGCTTACATTTTAATAGGGAGACAGTCAATAAAGCAA ACGAACATGCAAATAGATAATGGACTGTCAGTGGTGACAAATGCCATAGA GTAGGCTAAGATGCTATTTTAGAAGGGCTTGGAAAGTCTTCTGCATAGGG TAATATTGGAGCAGAGACTAAATGGTGGAGGAGGAGAATATGGGACTGTT CAGAGGAAGAATATCCCTGGTGAGGGAACTTCAAGTATAAACACACTGAG GCAGGAGCATGCCAGATACAAGGATGACAAGAAGGGCAGTGTAACTGGAG CGCAATGAGCAGGCAGAGAGTGGTAGATACATGTTTATATCTGCATC TCTAGAGTTCAAGGAGCAGGTTGGGGTGGAAGATAGAAACTTGGGTGTCA TCAGATTATATATGTTGTTTAAAGCCATATTTAATAGAACAGTTATTTCT GAGACCGAGTATTGATAGAAGAGGGGTGGCCTGAGAACTGAACCCTGGTG TTGGTCACGAGGCAGGTGCAACCAAAAAGAAGTAAAGTGGAATGACCAGC GAGGTGGGAAGAAGAATCCACCATACGTTGTTTTAGAAAGCCTTCGAAG GAAACTTGTTAACAGGAAAGACCAATCAACTCTGGTTAAATGCGGTGGGC CTAAAAATAGGGTGGCAATGAAGCCCTGTTCAAACGAGAGGCTTNATAGA GAATGGGATGGGAATGGGATTGCTACTATCAACTTCTTTAAAACCTT TGGAGGAAAGGG

>Sequence 471

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# Table 4

>Sequence 472

CCGGGCAGGTACTATATCAGCTCATCCCTGGCATGCACAACTGCTCAGTC TGGCCAAGGCACCAACTCCCAGAAGGATAATGTGCTGCTTCAGCTCATGC CCAGGGAGCATACTCTTTTGGGTGGGCCAGGCACCATTTCCCTGTGATGC TGGGAGCTGCTTCAGCTTAGGTACCACTGCACTCCAGCCTGTGTGACAGT GAAATTGTGTCTCAAAAAATAAATAAATGAATAAAGACACAGAATCTGCA GGATGGCTCAGTCAGTTGGAGACCCAAGAAAGCCATGCTGCATTTGCAGT CTGAAGGTCTGCATGCCAGACACCTACGGTAGCGGATGAGCCAGTGCAAG TCCATAGGATGGGCTGTGGAGAAGTCTATTTTGTAGGAAAGAGGCTGAGC TTTTTGTTCTGGTCAGGCCTTTAAACGTATTGGAGGAGGCGCACTTACAT TATGGAGGGCAATCTTGTTTACTCAGAGTTTGCAGACGTAAATGTTAATC TAGTCCAAAAATAGCCCCCGCCAGACACACCAGGAATTCTGTTTGACCAA CTATCCCACTTTTTGAATTTTGGAAGAACCCCCTTGAATTTATGAAGAAC AGAAACCCTGGGAAGCCTGCATAATTGGTCATCCTTTTATGCCTCTTATA AAAGCCCCTGGGCGGTTTAAAATTTATGATTCCCCGGGTTGGGGAATAGT TATAAAGTTAATAATCCCCGGACCTCGGGGGGGGGGCCCGGACCCATTTTG TT

>Sequence 473

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AAGTGTGGCTTTTAGAGATAAAAGGACAGGGTTGTTTTTGGGGTGCTCTGA
GAAGGGGAAAAGGACCAGTGATAACTTTGAGTAGCTAGAACGGGAAGA
TTTGAGGGGGCTGAATGAATTGATGAGAGTGATTTAACTTAAAGGACTGG
GGCATTATCTGTGGGCCCGGGTATACTAGCTTCACTTTTGAGGAAAAGTG
AAGCTGGGAAATGTGAGATCTACTCAGTGGGTCCGGGGAAATGTGAGAGG
AGTAAGGAAAGTGAAGACACAGATGTGTTGGAGGCTCCAGGCGAGCAGGG
TAAAGAGAAAGGGTTTCCTGGATTCTGATTACAGAATGTGCCTGTGGGGG
TTTTAGATTGAGGCCTAACAGCATTTAAAAGGAGCAACTGGGAGAACAGA
GTTGGGGAAATATTTATTGGTAGAAGAAATGATAAGTGAGCTACAGAAA
TAAGTAGAGGCCCATCTAAATATCAGGTTCCGGAATGAGGACTACACCAT
ACATGTGCAGCTGAATGACTACGTGGGACATCATCTGTCCGGACTATGAA
GATCACTCTGTGGCATACGCTTGCTTGAACCAGTACCTTGGC
>Sequence 474

GGGGCCATTGAGACTGCCATGGAAGACTTGAAAGGTCACGTAGCTGAGAC TTCTGGAGAGACCATTCAAGGCTTCTGGCTCTTGACAAAGATAGACCACT GGAACAATGAGAAGGAGAGAATTCTACTGGTCACAGACAAGACTCTCTTG ATCTGCAAATACGACTTCATCATGCTGAGTTGTGTGCAGCTGCAACGGAT TCCTCTGAGCGCTGTCTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTG GGATGTCCCTGGACAAGAGACAAGGAGAAGGCCTTAAGATCTACTGGGGG AGTCCGGAGGAGCAGTCTCTTCTGTCCCGCTGGAACCCATGGGCCACTGA AGTTCCTTGTGCTACTTTCACTGAGCGTCCTATGAAATACACCAGAGAGA AATTCCTTGGAATTTGCAAGTTGGCTGGGTTCATGAGTAAGCTTGGTCCA GCTTTCCAAAATGGCCACAAGAATTCAACTGGATCTGGAAGAGGAAAGAA ACTGATGGGGTGAACTGAACCCCATTTGATTGAGACCTACCCAGGGCTGA TGTCATTTAATGGGGAACCGGCACAAACTTGGGTTATTTCCTTGCCCCGG GGAAAATTTGGTTTTTGAAAGTTTTTTTGGTAACCGGGCCGCTTTTANAA TACGCTGGACCTTAAGGGGGAGCCCGTTCCCAAGTTTTTGTTCTCTTAAG GAAGGTTATATGCACCCTTTGATGAATCCTAGGCATTACGTTATCTCGGT

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#### Table 4

GGCAACCTTTGTTACCTCCTCATTTCCTTAGAATATTAAGTCATGTTCTA
TAAAGGTGAAGCT

>Sequence 475

AGGTACAATGCCCTTGGAGGGGGGGGGGCTTCATGGAAAATGGTTGCCAT GATAGGATTTGGGGAGAACCTCTATGTTTGAGGGAGTTTGGGTCANGACC TATCCGAGGAAGCAAAACTATTGCCCAAATATTCAAAACATAGTTTGGT GAAAGATCACCTATGATTCTGAACGAAATAGTGTAGATAAAGACATCTGG AAGTTTTCCTATTGAAAAAAAGAAAGTGCGAAATCAGATACTATTGTTTT TAAGGCTCTCTTTCTTAAATTTTCTAACTTGGCCAAAATGTCAATGGTAC CTTGTAGTATGACTTAGAATCTAGTTCTTTTGTCTCTCTAGTAAGGGTAAA ATGCTCCCTTTGCTCCATAAATGTATATAGCTGTTTTCATTATAAAAATT ATTITCCAATTACAATGTCATCAGTACCTACTTAGCCGGGATCAATTAAG AAGATATCTTAGTAATTCCCATATAAGTTTTTATAACTATCATTAATTTT AATTCTATTATTATAATGAAAATTATTTCTACTTCGTTGATAAGAGAGAT **AATTAACTATCATTTGCCTTATTATTCTTCGTACCATCTAATGTATCATT** TTACGATGTGTACTTATCTTATACACTATCTTGAGTTTGTATATAACGTA ACAATCTGAGTATCATAAACTATTTTCCTCAATTTAATTATCTTAACTTT CAGATGTATATATATGCTTGTTAACATTTGATTCTTACCTATCGTCTGTT TCCATTATTTAAGTATGGTATGTTATCTTTTACTTCTGTACAATAATCTA TTTATTCGCATTGTTAGTCATATAAATCATTCTTTCGTTAATCAACTAAT >Sequence 476

ACGTACCTTTAGTCTTTAAACCCTGATTCTTCCTTTTTTTGGTTTAGTCTA ATGGATGAAAAACTCAAACTGACTGATGTGGCTGTAATCTTGGGCCTGTG AGGTAGAACAGCAGAAAAAAAAATAGGAATTTAGAAGAAGAAGACTTGGTT TGAATTTATCTCCTTTAATAGGTGTGTGGCGGCTGGGCACGGTGGCTCAC GCCTGTGATCCCAGCACTTTGAGAGGCTGAGGCGGGCGGATCATGAGGTC AGGAGACTGAGACCATCCTGGCTGACGCGGTGAAACCCCGTCTCCACTAA AAATACAAAAAATTAGCCAGGCATGGTGGCATGCGCCTGTAGGCCCAGCT AATCAGGGGCTGAGGCTGGAGAATCGCTTGAACCCATGAGGTGGAGGTG ATTGGGAGCCGAGATCGCACCACTACACTTCAGCCTGGGCGACAGAGGGG GACTTTGTCTTAAAAAGAAAAAAAAGGAATGTGTCAGCCAGGTGTGGTG GCTAAAACCCTGAATCCCAACAGTTTGGGATGCTAAGGGGGTGGATTGCT TGAGCCCAGTATTTCAAGACAAGCGGGGCAAAAATGATAAAACTCTGTTT TTTCCAAGTATGCAGGAAGTAAGTTATTAGTATTAATATAAGTTCCTGGC  ${\tt CGGGCGGCGGCCGGCGGTTATATTTTTCCAACCTTGAAGGGTATAAA}$ GTATTTCACAAGTTACCGTTACATGTTGTTCTTATAAGGAAGTTTAAATC AAGACCCCTTGATTGTAAGGAGGGTGTTGGTTATGGAAACATGGGGGCTA AGTAGGTAAAAACAGAACTTTGATGTTTTCTTAAACAAAGTAGTTATCGG CGCTC

>Sequence 477

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GGAACAATGAGAAGGAGAGAATTCTACTGGTCACAGACAAGACTCTCTTG
ATCTGCAAATACGACTTCATCACGCTGAGTTGTGTGCAGCTGCAGCGGAT
TCCTCTGAGCGCTGTCTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTG
GGATGTCCCTGGACAAGAGACAAGGAGAAAGGCCTTAGGATCTACTGGGGG
AGTCCGGAGGAGCAGTCTCTTCTGTCCCGCTGGAACCCATGGTCCACTGA
AGTTCCTTATGCTACTTTCACTGAGCATCCTATGAAATACACCAGTGAGA
AATTCCTTGAAATTTGCAAGTTGTCTGGTTCATGTTCAAGCTTGTTCCA
GCTATCCAGAATGCCCACAAGAATTCAACTGGATCTGAAGAGAGAA
ACTGATGGTGTTAACTGAACCCATTTTGATTGAGACCTACACAGGGCTGA
TGTCATTCA

>Sequence 478

CCGGGCAGGTACTTATTGTATATTTCTCACATTCTTTCAGAAAGTTATTA

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# Table 4

>Sequence 479

>Sequence 480

>Sequence 481

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>Sequence 482

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>Sequence 483

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# Table 4

CTACTAAAGTAATAGTTAGCATTTTTGAAACAGTGTTGGCTTGTTTAATC CTCACCACAAACCCATGAGGTGGGTTAAGAGAGATGAAAGAACTTACAAG GTCACACAGT

>Sequence 484

>Sequence 486

CCGGGCAGGTACAGTGAAGCTTTGACCTGAGGAGCTCTTCTGTAGGTGAA GAGTGGTTAACTATGGTTCCTGTGTGCCTGGGGCCCCCCACTCCTAGGAC TCATCCACCCCCTACCCAGAACTTACTAGTACCT

>Sequence 487

AGGTACCTTAGTAGAGCAGTTCCAAAAAAACCCTGCCAGTCACTGCTGTGA CCTGCTCCACAGGACTCAACCTGAAATTGGACATCGCCTCCCAGGAAAAT GGTGCTTTAATGGAGCAGCTCCACATACATCTTCCAGTCACTCCTACAGC CTTCCCCACTATGCCAGAGCTAAAGCAATAACTGGCATCCCAGGGAAATG ATGCATTGACTGCCAGAGCAGTTATATTCCCAGTGCCTGGGCTGAAGCAG TCCCCTGTCTCCTGGGAAAATAGTACCTGCCCG

>Sequence 488

>Sequence 489

>Sequence 490

CCGGGCAGGTACCCCAAAACCAGGGGCTGCAGCTCCAGCAATTGGAAGG CCAAGTTTCTTGCACGCTCCCCAGAAAAGGGGCCAAGTCCATGGGGCTG AGCAGTGATAGACTGCAGACCTCACCACCACTGAACCTTGTAGGATAAGG CCCACTAGCCTGGGATGCTAGTGAGGCCACCCTAGTCCTCCTGAGTTCTC CAGCTGGGAGCAGCTCTACACTTCTCCGGCATGCAGCTCCCAAAGAGAGA GGCAGTCCACCTTTTTGCTGTCTCGCAACCCTCCTCCTGCTGCTCTCAG GCTTGGGAGGGTGCACAGCAATTAGGGACTATCACAGAACCCCAGCACA

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#### Table 4

>Sequence 491

>Sequence 492

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>Sequence 493

GAGCTCACCGCGGTGGCGGCCGGGGGCCATTGAGACTGCCATGGAAGACT
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CTCTTGACAAAGATAGACCACTGGAACAATGAGAAGGAGAGAATTCTACT
GGTCACAGACAAGACTCTCTTTGGTCTGCAAATACGACTTCATCATGCTGA
GTTGTGTGCAGCTGCAGCGGATTCCCCTGAGCGCTGTCTATCGCATCTGC
CTGGGCAAGTTCACCTTCCCTGGGATGTCCCTGGACAAGAGACAAGGAGA
AGGCCTTAGGATCTACTGGGGGAGTCCCGGAGGAGCAGTCTCTTCTGTCCC
GCTGGAACCCATGGGCCACTGAAGTTCCTTATGCTACTTTCACTGAGCAT
TCTATGAAATACACCAGTGAGAAATTCCTTGAAATTTGCAAGT
>Sequence 494

CCGGGCAGGTACGTAAGTTGAAGTCCAGGAGGGTTCCAGACACAGAGCTT CTGGTGTCTTCTCCCTGTGGAGTCAGGACTCATTACTCTGCTGTCTTTGA TGTGTGACAACAGGCACCAACTATCGCCAACTAGAGAAGCTCACCAGAGC TCTGATGTTGGAAGTTTTTATTGGGGCCTCAGCATGTAGACATGATTGAC TGGTTGGTGGATTAACTGTCTACATGGTTAATCTTAGTGTCCAGGTCAGC TGATACTGCGTGACCAAAAGCTCCTACCCCGAATCCCTTGATTAGTATTT CTGGCATAGCAAGCCCCCGTCAGAAACAAAGACATTCCTCTTAGAGGTAA TATAGATTACCTTTCAGCACCAGAGGGCAAAGGCCAGACTACTTTTTAGG CAAGTACCTCGGCCG

>Sequence 495

CCGGGCAGGTACTTGCCCTCTCTGAGCCCGCCTTGCTTCCTACCCTGTTG
ACTGAGCACATTGGACTGGGTCATAGTGGGTGATGGCCCCTCCCGGCTCT
GTAATTCCCCACAACAGTCCTGGTGCGAGTGTCAGGCCTGGTAGAACAGG
GTTGTTTGAGAGATGGTATCTAGGCAGCTATGTTTCCTCTGCTCCAACCA
GTCCTGTATCAGTCGCTTCAGACAATGTGGCACATTCTGTTCATTGTATG
AAGAGGAGGAAAGTGCAAAGCATGGTTGATAGGAACCAGATGATTTTGTA
ACAACTATTAATTCCAGATAAGGGGTACCTCGGCCCGCTTCTAGAAACTA

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# Table 4

AGTGGAATCCCCCGGCGCTTGCTAGAAATTTCTATTTTCAAAGCCTTAT TTGATTACCGTCCAAACCTTTTATGGGGGGGCCCCGGTTACCTCAGTTTT >Sequence 496

TTTAATTGGTTTTATAGAGAAAATATAACTAAAAGTAATGTCATATGAAA TAATGCATTGCTTATTAAAAATACATACTGAAAATATGCACTGTCAATTT CAGATACTCGATCATTTTTATATTATTTGGCATATAGCCTACTTAATTCT GTAAGTGGCAACATGTCTCCATCCCTGATAGAATATATTTGNCTATTTGT TGTTTTCATTTAGTTTATATTATTAATACAATGTTCAAAAATGTAACAA TCTTCATTGATTAATATGGAAAAGGTAATGGGGGGAAAACCAAATITTTT TTTTAAATTTCATTCCATTCGGTAAGTTGTAACTATCTTTACACGGAGTG TAACATTCATTCAACTGATTCTTTGCCATGAAAACAAAAGGAATCTTT GATTCTTTGTGTATTTACCCAAAGATTAAGGGTATGTTTAAGATGAAAAA ATGCCCTTTTCTTTGCTTCCCTGGAAGGGACCCTGAATAAAATTTTAAAA AATTGAAAACCTGCAACACTTTTTGCAATCTTTTTTAACTACACCTAAATA CCGCCTATTGGAATTTTGGCAAAAACTTTTCTGTAGGCAAAAATCCCAA GGCATCCTTTGAGGCTCTTTCTTATTCCCTTAAAACTTTCAAAAACTTCC ACAAGCCAGAACCCAATTAGCTTTCTTTCAAACCCCCACAAGAACATGGG GGCACCAAGGCCCTGNGGGAAATTTTGGTAAACTTAACCAACCT >Sequence 497

CCGGGCAGGTACCATTTTAGGCCAAAGCTATCCCATGACTATTGCCTAGA ACGGGAGAGGTGAACAGAAGAGGTAGGGGCTGTGAATGCTTTCGCAAAAC TGACAAGCAGGGCGAAAGGGAAACTCTGGAATATGAGCTTCCAGACTGCA CTTGCATCTTGTTTATCTCACGGTTCTCAGGGGCCACCACCTTACCTGGC ACACCGAATGTGCCTGAGGAATGCTTGATGCACTAAACCACAAATCAGTG CAATGGAATTGCCATCCCCCAAAAGTCCTTTTTTAAGATAAGAACGTATT TTCTGAAGTGGATTCTGATAGCTATTAGTTTTGGTGGTCTGGAGTATGCT TTTACTCTTTCTCCCTGATACTGGCAATAGAACACATAGGTCCACAGGTT TGG

>Sequence 498

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>Sequence 500

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>Sequence 501

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#### Table 4

>Sequence 502

CCGGGCAGGTACCCTGAGCCTCCTGTGCCATTCTTGCTAGCTGGACAGAA GACATTGCTACTGAGCCAAGAAGACTTGATCTCTTTACACCGAGGAAGA AGGGAAGGTCTGATGCAATGAAACAGCACGTTTGCTTATAATTCTAGATC AGAACCATAATAGTAATTTGCCTACTAACTATGTAACATTGAACAAACTA CTGTTTTGTGAGCCTGAAAAGTTGGTACCT

>Sequence 503

>Sequence 504

>Sequence 505

>Sequence 506

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AAAAAAACGTTCGAGACTGCGCAAAGTGAAGCCACAGCTTCAAAACGCC
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GGTGGACCAGCGTGTGGCCGAATATGTCAGATACATGCAGGCCAAAGGGG
ACCCCATCACCCGGGAGGCGATGCAGCTGAAAGCTCTCGAAATNGNNTAG
GAAATGAACATTCCAGAGAAAGGGTTCAAGGCAAGCTTGGGTTGGTGTCG
AAGAATGATGACAAGGTATGACCTGTCTCTGAGGCATAAAGTGCCCGTGC
CCCAGCACCTGCCGGAAGACCTGACTGAAAAACTCGTCACTTACCAGCGC
AAGGTCCTGGCTCTGCGCTAGGCGCATGACTATGAAGTAACTTCAGATGG
GGAATGCAGATGAAACCCCCATTTGTTTAAAAGTGCCATTACTGGTTACT
GTTGATAACCAAGGCGAAAAGCCTGGCTTGGTCAAGACACCCAGCCGGGA
AAAACTGAN

>Sequence 507

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### Table 4

TGGTGAGGTTGATCGGGGTTTATCGAATACAGAACAGGCTCCTCTAGAGGGATA

>Sequence 508

AGGTGCTGTCGCCCGGGCAGGTACAGCTCAGTGCATTTTACGCAAAGTGA ACATAGCAGTGAACCCAGACTACGGACCATAACATTACCAGAAGGCACGA AGTCCCTGGAGTCCTCTTCTAGTCAGTAGCCCTCACGAGTAACCAGGATC CAACGTCATCTTGTTCGGCTTTGACTTTTACAGGAATGGAGTCACCCAGT TTGTCTTCTTTTGTGCCTGCTTCAGCTTGCTGCGGGTGCTGTAGCTGGCC TGCCCTGGTGTGGCCGGGGACTCCCTTGCGTGAATATACCCCATCGTTTC TCAGTCCCTTGAACTGTTTCCAGCTGGGGCGATCGTGGATAGTGCTGCTG TGAACAGGCTTAAGCACGTCCCTTTTTCTCGAATTTTATTGAAATACAAC AAAGTGCAAACATCACAAGTGCACAGCTCGATGAGTTTTTACCGACGTAT ACACCCGTGTAGTCACCGCCCGCAACAAGCAAAGAATGTTTCCTTGCACC CCAAAAACCTNCCTTGTCCCTACCTTTGCCACACCCCCGCAGAAGGTCAT CACAATTCTGACTTCTTTTTCCCATAGACAGATGCCTNCGTTCTTTGAAT TAATATGATGGGATCATACAGAGTGTGCTCTCTCTGGAGAAGGTNTAAGA TTCTTTTTTAAGGCATTCTTGGGGCCCTGGGGTTCATGGAACCGGGGAGA GCATTTTTGCAGACCTTACAGGCACCGCGGTTAAAACAAGCGTGACCAAG CCGCACAACGGGGAACAAGACAAAACTTGAAAGTCCTTCTCACGTGCAGC CTTGAGGTT

>Sequence 512

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#### Table 4

TTACACTGGCCTTCCTTGGGTCCTTTGTACCT

>Sequence 513

>Sequence 514

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> Page 95 of 990 of Table 4

# Table 4

>Sequence 517

>Sequence 518

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>Sequence 519

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CTTGTTGCCTGCAACCTGGGGTCTCCCATTCATGTATATTTCTCTCCTTG
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TATTGGTTCCCTTTTTAAGTGAGGGGTTAAATTTGCCCCCGCTTTGGCGG
TAAAATCAATGGTACATTAACCTTGTTTTCCTGTTGTGAAAAATTGATT
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CATTAAAAGTGTTATAAAAGCCCTGGTGGGTGGCCCTAAATTGAGGGAAGC
CTAA

>Sequence 520

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>Sequence 521

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# Table 4

>Sequence 522

>Sequence 523

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>Sequence 524

GATTATGAAATTGTAAAGGTTACTTTCTGCTCTCTAATTCCTTTACTCGT AATTTTAGTTTTCTTAACGGTATAACTTGATGCAAATATATACACAGTAG ATACTAACTTTCACTGAAGTGTTTTCGGGAGGGAGGGGCACTTTACAAGA GCTCTTAGGGCACATGGAAAGCGCCTGCCCCTGTGCCAAGAACTTAAGAG AGAGCCGGGGATGGACCCTCCTTGCTGTGGCTCCTGAACAGTGCAGCCTC TCTTCTGATGCACTCACCCTGGCGAGGAGAACCGCTTGTGTGGCGACTGC TTGGCCCAAGAGCGAGTAGGATTGTTGACTCAACTCTCTTCGTGTCTGCT CAGAGGGGAGGAACACCTGGCTTCACCTGTTTACATAACTCTTGTTGATT CTTGTCCCTAAGCTCTTCCAGAATGCTCTTTTGGGCTTTTCCTCAAAAGG TTTTTAGAAGAACAAGCTTTTTGGGGTGGCAAGAAATTTAGGATGGAGAG TTTTGTTTTAACCTATTAGTCAACGTGGCATCAGAGAACCACATGTGCC CCACAGTCAGGGCATGTTCAGGAAATATTTGTTGAATATTATTTAAGTG AATGACTGGTTGCTGGAGAACAAAATTTCTCTGATGAACTTGACAACGTA TGTTTGTGGATTAAGTAAACATACCTACCATTTAAAACTTTTAATACATA ACAGTAGTGTACACTTGAATGTCATTT

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### Table 4

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>Sequence 529

> Page 98 of 990 of Table 4

### Table 4

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>Sequence 533

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# Table 4

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TTCACAAAACATATATCAATGAATTAAGAGGATCTAGATCCGGATAGTAC
CTGCCCGGC

>Sequence 534

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>Sequence 537

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### Table 4

TCTCCTGGCACTCTTAACTTGCACACATTGCAACCTTTTATGGCAAAGTA
ATGGTCAAGCTATCCTAACAAGGACGAGCCCTTATTAAATAATTCACTGT
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>Sequence 539

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>Sequence 541

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GAACTAAAATTACTCATTGTAATTTCTCTAAAATTCAAAGCCTATTGGAA
TCCCTGCTCTTGTTATGTAAAATATAAATATTCGAGACATTTCACACCAC
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>Sequence 543

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> Page 101 of 990 of Table 4

# Table 4

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>Sequence 546

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>Sequence 547

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### Table 4

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>Sequence 550

>Sequence 551

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GTCCCTCATTTCTCCAGCCTGTCCAGGTAGTGTCTACGTCTCCAACTCAC
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>Sequence 552

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>Sequence 553

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>Sequence 555

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# Table 4

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>Sequence 557

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#### Table 4

>Sequence 560

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>Sequence 563

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TGAATGAAGGCAGAATTTCGGAGTCTTGACTAGATGAAGGCAGTAGTAA
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ATGTTGCTTTGGTTTCAGTTGGACACATTGTGAGGGTAAATGGATGATTT
TCTAATGCAGATACACTGGGACAATGTAGAGTAATACTGACCAGGTCT
TGCTTTAAAATTTTCTTTGACCATTCGGATTTCCATGACATCTGAGGGAT
GACTTATGACCGAAATGATG

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#### Table 4

>Sequence 564

>Sequence 565

TCGGCTCCCAGCTACTCACAGAGAACGTTTCTGTTTCTGACAGCAGAGTA AGAGAAGAGGGAGAAGAGAGACAGCCCATTCTCTTTTGGCCTAATTCCT AAGGAATCATGCCTCTGCCTTCGGGCCATTCTCAAGTCTTGTTCAAGGAT AAAATGATTTATTGATGGCCGTAATTAAAAAAGCAATGCCAACGGAAGCAG CGTCAGCATTTTTCATTTATACCT

>Sequence 566

AGGTACGCGGGGTGTTTTTGAAAGGGTCTGATAGGAATTGCAATGGTATA
GGTTAAGTAAGATAAAGTCACATTTACTGAGTGGGCTCTTTGGGGACAGC
ATACATCAGAGCATATAGTCTTCTTGGTCTAGCAAAGAATAATGGTTATG
AAAATTAACCATTTAGGGCTAGAGAAGGTCTTGGAAATTGTATAGCCAAG
CCTCTTCATTTTGTCAGTGAGGGGATTGATTCTCCAGCTGATTTAGGTCT
AAATCTGTGACAATGATTTATATACCTATTCATGATCACTTAACTGGTAT
TATTAATGGCAATTAATATGAGTCAAGCAGTGGTTTAAATGCTTTGCATA
TATTAACCCATTACTCCACAACAGCTCCATAGGTAGGTGTATTATTATCC
CGCTTGTAAAGATGAAGAAACTAAGGTAAGAGAGTGTAGTTCACTCAGCT
AAGATCACATATTTCAGCCTATTTGTCAAATCTGTTCAATTTTCTCTATC
ACCACAATCCCTACTCTGAGCCAAGCTACAATCACCTCAATCTGGACTTC
TGCAAAGGCGCTCT

>Sequence 567

AGGTACACAGTTAACCACAAAACAGGCCTCTCTGAAAAAAGCCATTGCC
ATGGACTGCCAGACAGACAATGACAAGACACAAATACCTTCTGGTGTGTG
AGCCACGGGACATGTGAGCTTCCCCGCTGATGCTCCTCTTATATCAAAGA
TCACTTTCACAAGATGAGCGACTCAATATCTTTTATCAAACCAATGATCA
CCTGCAAGCTATGGTATATTTTTGCAGCTGTGTAGAGCTATGTGGCATGA
GAATGTGGGA

>Sequence 568

>Sequence 569

>Sequence 570

AGGTACTGGGGAGAACTCAGAGAAGAAGGGGATGCACTGCTGGGCCTCA TGAGTTGGCTTATACTTCACCTTGAGCTAAGCATACTAATACCCAGTCCA GGCAGCATTGAACAGCTCCGCGCAGATCTCACCCTCCAAAAAACAGGAAG AAAAAGCCCTCTCACTGCAAGCAAGATCCAAAGAGAAGAGAAGAGGAAG

> Page 106 of 990 of Table 4

# Table 4

>Sequence 571

AGGTACCATTCTCCTTCAGGCTGGCTCTATGTTCTTCATGGGCAGCGTCT CCACGGTCATGCACCATGCCGCTGGCTTCTGGACCCCGAAGGTGCTATGG AGCCCAGCTCCATTCCACTGAGTCCAAAACTCACGAATACAGAGGCCACC AGCACTACTGAAATGCCAGCAGGGTGTGTCGGCATTTGGAGGGCCTTCCA GCAAAGCTTTGAACATGCTATAATTGCTCCAATATAACAAGTGATGTTCC AATTAATAAGATAATTTACAGCAATCCACAGTCTCTGCCACAGGTGGTTC TTTCTCCAAGAGGGCTGGCCCGGGACAGAACTGGACAATGCTTGAAGCCT CTATCTGTCCCTCTGCCCATAATAACTCCTGTCTCATAGGAAATACAATT GTTCAGAAAGACCTTCGCTAAAATAGACCAAATTGGCCTGATTTTACTCT CTTTAAAAGACCTCCTTTGTTACCGCACTCAAGCCTTTTTTTAACCATCA TTTCAGGGAGGGGACCCCATGTTGAAACTTTCCTTCTGCCCATCATCCA CCAAGGTTTTCCTGAGAAGAAACATTAACTGAGGACTTACCTAACCTTTC CAGCTGTCCTCGAAGGAGGGGGGGATAATTGGCTTTCTACCAAAAGATTAA AGGGTTAAAAAACGGTAAAGCATATAGCATCCCTTAAAATGGCCCTAAGC CCGGAAACAGGTGGGGGGTCCCTGCGACATA

ACCATATCCTGGGCTGGTTAAAAACATACCATCCCTGTGATGGTGATGAC
CATTGACTTCACTCCACAAGAATTTATGTCAACGTGTCCTAGACATTT
GGTAGTAGAGGTATAGCTGTAGTCCAAACCTCTACCAAGCTATGGTTTCT
GAGAGCCCTGTATGTTAAGTGCCTACGGAATGCTCAGCATAGTCAAAGAC
ACCTTAGATTCACATTATACGAGGAGCCACACTGCAGTTATTCAAGATTA
AGCACTGGCTGGAGAAACTGGCTGTATGAACTCCAGCCTTGGGTGCGCTG
TACCTCGGCCGCGACCAC

>Sequence 574

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#### Table 4

CGAACTTAGTCAGCTTGCCAATTTTACCTGGGGTTCAGACCTCACTCGAT
TCTTTCCATTTCCATGTCGTGGATGGGGGGAGGTGCAGGAAAGGGGACAC
TCATCTGGGACTGGGTAACTGTCAAGCCCAATCTAATCAAAACCACCCTA
AAGCACAAGGACTGGAGAAAAACACTAAAAATTTAGAACAAGATATTT
AGACAAGATGCTTCCTAAATTCTGTGAAATTTTCATGAAATAAGATTCCA
AACCAAAGTCATTATCTCTCTTTTTCCTTAAATAGACTATTAAAATATG
GTGGCCTGAGAGCCACAAAGAAGAACTGTGAGCCAAAAACTGGTTTCTA
ACAGGTGGCCTTGGCATTTTTTACCGGGTGCCCCAAAACTGGTTTCTA
ACAGGTGGCCTTGGCATTTTTTACCGGGTGCCCCGGCACTTTTACAGG
GGGCAATTCCTTGGCCGTCTATAACTAAGGGTCCCCCGGGCTGGCAGA
AATTCGTATTCAAGCTTTCGTTACCGGCAAACTCAGGGGGGCCCCCGTCCC
CCACTTTTGGTCCCTTTAGGG

>Sequence 575

AGGTACTAGTAAGTTCTGGGTAGGGGGTGGATGAGTCCTAGGAGTGGGGGGCCCCAGGCACACAGGAACCATAGTTAACCACTCTTCACCTACAGAAGAGCTCCTCAGGTCAAAGCTTCACTGTACCTGCCCG

>Sequence 576

>Sequence 577

AGGTACTITCTGTGCCCCTCTCCTCACTTCCATCCCTGTCACTCCTAAAG
GATCTCCCTCTGCTAGGATTCTTCAGACCATGATCTGAAAACAACTG
ATTTAGAGTAAGTAATGCTTTGGGTGCTCTTCCAAGAATTCTATCCCACC
TTTTACTTTTGTGATACCCAGTTAATCCTTTATGACCTAACTTTCCATTA
CATCAAAGGAGCATAGGGTCCAGAATCTTACAGGAGTGCATGACTTTTCC
ACAGGCACTTCTGGCTTGCTTGTCAGGCCACCTGAATTAGTATTGCTTCT
TTCTCTCATAATCAGCCATATGCTAATCCCTCCCGTTCTCTATTGGACAG
ACCAGAACCTCTAAGGAGGGCTGAACTGACTTGCTTGACGAGACACAAAA
GCACTGCTACACAGCAAGAAGGTTGAACTGTTGGACACAGGCACTGCGGG
GGGCAGCCTGCCCTCCCTTCAGGCAGGCTTAGTGGCCCTGAGGACATTC
CTTGGCGATTGGCATGGCCTGATCTTTTATGTCAATCATGCCGTATT
GCCAGGACACCAGGCTCTTTTATGTTGATGTAGACTTGTTCCCAGAGCCC
AAAGGGTTTCTATACCTGCCCGGGCGGCGGTTTAAAACT
>Sequence 578

GTCGACCCACGCGTCCGATTCCAGAAACACATCGCTTTCTTCCTCTGTAC TGGAGTGTAGCAACACAAAGACACAGCCAACAATTTCACTTGGTGGTCTG ATGAACTCTCATAAATGCCTTGTTTACAGCATAAGAATGTAAGTACATAT TTATATATCTCTCTGACAAAATATCCTTTCCATATATCTGATGGCCAT TAATTTGGACTTAACTAGTTTTGTCCAAAAATGAAATTCCAAGGGCCAGG GAAGAATAAAATGTACTTGAAAAATTTCTTCTAACTGGTATAAATATTAA ATTAAACTTATATGCTAATTGGAACAATAATGGCCCTTTGGATGATTCTA CATTACAAGCGTCAACTGAAATAAGGTCCCCAATTGTCACTGAGAACATC AAAGGGATCTTACTTTGAGGAATAAATATGTGATTATAGTGATTATGTGT GAATTGGGGTTATATTCTTCAATAAAGAAACATGCTGGGATTTACAACTC TCCTCTGAGACTTAGTCAAATAAATTAACACATATTGAACACCCACAGGA TTCCTGCAGCAGAATAAACAAATTATTTTACCAACCTGCAAAACATCAGC TAGTGGACTAAGCTGGACAAGGAACTCAGCTGAGCGTGGGCCCCAACAGA ACAATTAACCAGGCAGAATTTATTTTCATTGGGGGGTTACGTCTCCCTTG TGCAATCTAAAAAGGGCTTGGACTGGACGTAAGAACTGGATTCTGGTTTC CACTCTGGCATTTGAAAGTTGCATAATGGGATTGAGTTTTCAAATTCCTA ATTTGAAAGGGAAATCCTTN

>Sequence 579

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# Table 4

CCGGGCAGGTACGCGGGGGGACTTACAAGATGGATAGGACCTGGTGGCAG CTGTCCTTGAGGAAGCCAGAGCCTGGAGAGACAGATCTCATGTTATAGCA GAGTACCT

>Sequence 580

>Sequence 581

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>Sequence 582

TAGGGAGTCGACCCACGCGTCCGTGCATTTCCAACTGAGGTACCCTGTTC ATTTCACTGGGACTGGTTAGGCAGTGGGTGCAGCACACGGAGGGCAAGCA GAAGAAGGGTGGGGCATCTCCTCACCCAAGAAGTCCAAGGCACGGGCAAG GGAGTCTCCCTTTCCAAGCCAAGAGAAGCTGTAATCTACAAGGAACTTAA ACAAATTTTCAAGAAAAAAAACAAACCCCATCAAAAAGTGGGTGAAGG ATATGAACAGAATTTCTCAAAAGAAGACATTTATGCAGCCAACAGACATA TGAAAAAAGCTCATCATCACTGGTCATTAGAGACATGCAAATCAAAACC ACAATGAGATACCACCTCATGCCAGTTAGAATGGCAATCATTAAAAAGTC TGGAAACAACAGATGCTGGAGAGGATGCAGAGAAATCGGAATGCTTTTAC ACTGTTGGTGGGAGTGTAAATTAGTTCAACCATTATGGAAGACAGTGTGG CGATTCCTCAAGAATATAGAACCAGAAATACCATTTGATCCAGCAATCCC ATTACTTGGTATATATCCAAAGGATTATAAATCATTCCACTATAAAGACA CATGCACACATATGTTTATTGCAGCACTATTTACAATAGCAAAGACTTGG AACCAACCCAAATGCCCATCAATGATAGACTGAATAAAGAAAATTCCCA TACACCATGGGATACTACGCCACCATAAAAAAAACGAGTTCTTTTTCTTT GCAGGACATGGATAAACTGGAAACCTTATCTTAGNGGGTACANCCCCCCC CCCCCACCCTTTTT

>Sequence 583

TGGATATGTAAACTTCTATGGGGAGTCGACCTACGCGTCCGCGGACGCGT

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#### Table 4

GGGTAAAGAATGGGCAGCCAAGCCAGGCGTGGTGGCACACACTTTTAATC CCAGCACTTGGGAGGCAGAGGCAGACGGATTTCTGAGTTCGAGGCCAGCC TGGTCTACAGTGAGTTCCAGGACAGCCAAGGCTACACAGAGAAACCCTGT CTCGGAAAAAAAAAAAAAAGAATGGGCTGCCAATCCACAGCCACCCTGA CAACGGGGGGGGGGGGGGGGTAGCTAAAGCCAATTTGAAGAAAGCCCCT ATGAAAGGGCGCTTTTTCCTTCAAGGTACAGACCAGTCCAAAATGTACAG ACACCCCTCACTATGAACACAAACAATCCTGGTGTAAATTACCTAACTAC AGTTGGAAATCTAACTGGCTTTAAAAGGAAAAGAGAGCCTGCCGGCTCTT TGTGGTTGCCATTTTATATAGATGATATATATTGAGCTTTGGTCTGGTAT GCTTTGGAATGCTTAGTGCAAGCCCTGGTTGCCCCAAAGACCCAAGTGAT GTTATTGGACCTTGACCCTAAGTTACTTCTGGTTGGTGAAAAAAGAAGCC TGCAGTCGATAGTTGGCAGGGAAAACCAGGGGGGGTTTTAGGGGTCCTGAG CTTGGGGTTGTAGAAAAACACCCAGAGGCCGAAAAGGTAAAGGGAGAGGA ATTGGACTAAAAACCGCCCAAAAGGGAACTTGAGGGAATTGATGAAGGCT TAACTGGCTGGGATAAGGCTACTTATGTGG

>Sequence 584

TGCATAGTTAATCCTTAAGGAGTCGACCCACTCGTCCGCGCCACCACGCC CGGCTAATTTTTGTATTTTTAGTAGAGACGGGGTTTCACCGTGTTAACC GGGATGGTCTCGATCTCCTGACCTCGTGATCCGCCCGCCTCGGCCTCCCA AAGTGCTGGGATTACAGGCGTGAGCCACCACGCCCGGCTGATTTCATTGT TTTTTATGTCTGTAGTATTCCATGGTGTGTATGTGCTACATTTTCTTT ATCCAATTCACCATTGATGGGTACTTAGGTTGATACCATGTTTTTGCTGT TGTGAATAGCACTGCAATGAATGTATGAGTGCCTGTGTCTTTTTGGTAGA ATGATTTGTTTTCCTTTGTGTATATACCCAGTAATGGGATTGCTGGGTCA GTTGGTAGCTCTGTTTTAAGTTCTCCGAGAAATCTCCAAACACGGTGGAA TGTTGGCCTGTAGTTTTCTTTTTTTTGTTGTCCCTCTGCCAGATTTTGGTA TCAGGATGATGCTGGCTTCATAGAATGAGCTAAAGAGGAACCCCTTCTCC ATTITTTGGTATAGTTTCAGTAGGATTGGTATGAGTTCTTCTTTGTACAT TTGGTAAAATTTGGCTGTGAACTCATCTGGGCCAGGGCTTTTTTTGTTGG GAGGTTTTTTAAAATACGGATTCAGTTTTGAAATTGGTATTGCTCTGTCA AGGTTTCAATTTTTCCTGGTCAAACTTGGAAGGTGGGGTTTCCAGAACGT ATCTTTCCCTTCATTTCCTTTCTTTTTTTTTTTTGGAACGGAGTTTTTT CTGGCCCCAGGTG

>Sequence 585

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AAGTTTCACAGACTCAAAGTCTTACGGAGAGTTTGGTAAACCCAGATCTC
AACTCAGATTTTCCAGTTCTGCTAATTTTCCCCATTCCCTCTGGTGCTG
CCTTTTCAACTTGGGTTGTCAACAGGCAAATGGGACCAGTGGAAGCATTC
AGAGGAGAAGATTGATGGTTTTCAGATGTTTCTTTCTCCCCTGACATGAT
GTCTTAGGCACAACCACAGTATTTCAAGTGGTTGAAAATCAAGCTGAGCT
AATGGGGGCTGGAGTGAGGGTGGAAGGGCAGACCCAGAGACTCAATCTAC
CAGATGCTCATTCTTCCAGCACCCACCCTACCCCATCAATTGTTCTGG
CACCACCACACAAGCCCTAAGAGCCTTGGTGGAAAAGTCTGGAAAATACT
GTGGTAGGGGCCCATCAAAGTGACGATGGCCACCACTTTAATAAGTTCTG
CAATAAACCAGGGCTCCAAAGCATTTGGAAACCTAGGAGGGTAAAATAT
CCCATGCAACGGACCATCAAAACAGATGCTCAGAACAATTAATACCTTC
>Sequence 586

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### Table 4

>Sequence 587

GGATAGTTAACTACTATAGGGAGTCGACCCACGCGTCCGCTCAATTCCAT GTCCTAAAAGGGAGGTCAGAGAGTTTTCTGACAAGTCTTATAGGTTGTCA GCACAATTGTGTCAAGGTACTCAACAGTTCTTGAGCATTTACTTAAACGA ACTTATGAAAGACTGACCCATAAGATAAATGGGTTATATCCACTTACAAT GAGAGATACCTTTCCAGTGACCTGAAGAAGTGTCTAGAGTACCAAGTGTC CATTAGGAATGATGAGAGGCAATACTGAGATTAGTCTGTGAAAAAATTAA GTAACTAAAATACTAGGAATATATGATATGTACATACATCTTCATATATG TTTCAAGTTTGAAGGAAACCTAAAGGATAAGCTGAAGGGAAAGATAGAGA AATACAAAATTTCTGCATTAAAATGAGTGGTACCGTTTGTCCCTCAGTAT CTGCAGAGAATTAGTTCCAGGACCCCCATTTACCAAAACCTGGGGATGCT CAAGTCCCTTATAGTTGAGCCTCTGTACCTGCAAATCCCTGCAGGTACAG AGGACCAACAGTATTTGGACAGCAGTGAATAAAGAATCTGGGCAAGGGCT GGGCATGGTGGCTCACACCTGGAATCCCAGCACTTTGGGAGGCTTGAACA GGCAAATCAACTGAGGGCAAGAAGTTGAACCCGCCTTGGCAACTTGGTGA AACCAGTCTCTACTAAAGGACACAAAATTACTGGG

>Sequence 588

GTGGTCGCGGCCGAGGTACTATGGCCTGACTGAGAAGGCCTAGATCCTTG
AGAAATCGCCCCAAGGTTTCATAAAGATCAGCTAAGCAACTCATGTTGTC
CTCGCCTTCGCAGTTTTTCTCATACTGCTTCAATGAATCGAAGTATTCTG
TTGCCATTGCACTTTTGTCTTTGCCAACAAACTGCCAATAACTCAGCAAC
TCAGCAAAGTATCCCCTTTTATAAAAGGTTTTGAGACACAAAAGAGATTAAG
AAGGCAACCATGCAGCTTCTGTTTACTTCCCTGCT

>Sequence 589

AGGTACCATGCTGACATTCTGCAAAGTCTGCATTCGCAAAGCCTGAAATG
ATTCCAACTGCTGCTGAAGGACTTTCAATGCTGATTGTGGTTGGATTTGA
TTTTCTGATTCTGCTATGCAGCCATATTTTAGCATTCAGAGAAGCAACGG
AGCATAGCGTGGTGGTGAAGACAGGCAGTCCGGAGCCGCCCTGCTGAATG
CCCGCTCCATTCCTGTGCTGACTGTTGACCTTTAGCAGTTAACCTATCT
GTGCCCGTATACTCATCTGTTTCACTGCAGCCACTTTGCTTTACCCCCTC
CTAAGAATTTACGATTTTGGACGCTGAAAGGAGAACGGAGTCAACTTCAT
CCTCTTCCCCGGTGCTGCTTTTATGGTAACCACCGGGTACCTGCCCTGGCG
GACAACGTGCT

>Sequence 590

CCGGGCAGGTACAAGTTACCTACCCTTTCCTTGCCTCAGTTTCCTCTTT GTGACAATGGGGACAATAACAGAAACTGCCACACAAGAGGGATGTTAGAG AACTGACCAAGCGAATGTAAGTAATGACTTGGAGCAACGTATGGCTAAGA GTAAGTTAGGGGTTGTTACGATGACTTTCCTGAGATAAACAGGGAGAT >Sequence 591

>Sequence 592

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## Table 4

>Sequence 594

>Sequence 595

AGGTACTTGGTGAAGTGAGATTCAGACTGAGTGGGGTCACAGCACAGGGC ACTGTCTTGCCTGGCCTTTATCTGAGCCAGTCACACCTCTCCTGGCCACTA TCTGTGGTCTAGCCCCCTTTGTGCAGAAAGAAGAAGAAGAAGACCTTGAGGA CCAGCCTAGTCAGCCGGGGGCCATTGAGACTGCCATGGAAGACTTGAAAG GTCACGTAGCTGACACTTCTGGAGAGACCATTCAAGGCTTCTGGCTCTGG ACAAAGATAGACCACTGGAACAATGAGAAGGAGAGAATTCTACTGGTCAC AGACAAGACTCTCTTGATCTGCAAATACGACTTCATCATGCTGAGTTGAG TTGGCAGTTGCAGCGGGATTCCTCTGAGCGCTGTCTATCGCATCTGCCTG GGCAAGTTCGCCTTCCCTGGGATGTCCCTGGACAAGAGACAAGGAGAAGG CCTTAAGATCTACTGGGGGAGTCCGGAGGAGCAGTCTTTTCTGTCCCGCT GGAACCCATGGTCCACTGAAATTCCTTATGCTACTTTCACTGAGCATTCT ATGAAATACACCAGTGAGAAATTCCTTGAAATTTGGAAGTGGGCTGGGGT TCATGTCTTAACTTGTTCCAGCTATCCAGAATGCCCACAAGAATTTACCT GACCTACCAGGGCTGTGTCATTTATTGGAAACCGAACAAACTTGCTTTTT CCTTGC

>Sequence 596

>Sequence 597

CCGGGCAGGTACCCAAGCTTCACAGCCCTGTCTCTGCCATGGAGAGCAGG CCCACGCACTGCTGCTGGAGCAACCGTGCTGGTCACAGGGCCAGAG

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#### Table 4

>Sequence 598

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>Sequence 602

AGGTACAGTGCAGCAGAAGGCTGGTAGGATAGTTTCTTCCACATCCATGT GAACCTCAGAGTCATCTGACCATTGGCCTTGTTCTCTTCCAGGTTCTAGC TGGCCAGAGACTTTTTTGGCCTCATACTAACTGCAAAATTGCACACAGTT

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## Table 4

>Sequence 603

>Sequence 604

CCGGGCAGGTACTGCCTTTTTGGAGCTCCTCACGCATCACCATTTCTCC
TACCTATGATTCCTTCAGCTTTTGTTAATGCAATTGGCTCGCTTTTTGTT
TTGTTGAGTCTTGATTTAATTTCCAGGCTTTGCTCTCCAGCTTTTGTCCA
GAGACACATCCTGTCCTTCACTGATATCTCCTCGCAAATCAGTAATCACA
GATGTTGCGTGCAGTTCACTGATATCTACTCCTCGTATTTTGGGGTGG
CTTACTGCATACCCACGAGTAAGAACTTCTTGCAATCAACAGGCAATTTG
CTGGGGTGCTGGGGTTTGTTCCATTATCAAACAAACTGGGATTCCTACCC
CAGTTCCATCACTTACAGGTTGTGTGTGACCTCGGATGAATTCACAA
TTTTTTAAACTCTTACTACTGGTATCACTCAATTATGACTGGGGCCTGGGG
TACCTT

>Sequence 605

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## Table 4

TATTTTCCCGTTTTTATTTAAAAGGGTTTAAAAGTTCCCGCTTTTGCCAT >Sequence 606

Sequence 607

GGGCCATTGAGACTGCCATGGAAGACTTGAAAGGTCACGTAGCTGAGAC TTCTGGAGAGACCATTCAAGGCTTCTGGCTCTTGACAAGGATAGACCACT GGAACAATGAGAAGGAGAGAATTCTACTGGTCACAGACAAGACTCTCTTG ATCTGCAAATACGACTTCATCATGCTGAGTTGTGCAGCTGCAGCGGAT TCCTCTGAGCGCTGTCTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTG GGATGTCCCTGGACAAGAGACAAGGAGAAGGCCTCAGGATCTACTGGGGG AGTCCGGAGGAGCAGTCTCTTCTGTCCCGCTGGAACCCATGGTCCACTGA AGTTCCTTATGCTACTTTCACTGAGCATCCTATGAAATACACCAGTGAGA AATTCCTTGAAATTTGCAAGTTGGCTGGGTTCATGTCTAAGCTTGTTCCA GCTATCCAGAATGCCCACCAAGAATTCAACTGGATCTGGAAGAGGAAAGA AACTGATGGTGTTAACTGAACCCATTTTGATTGAAAACTACACAGGGCTG ATGTAATTCATGGAAACCGCAACAAACTGGCTTTTTCCTTGCCCGCGGGA GTATTGGGTTTTGAGAGTCTTTTTGGGACCCTTGGCGCTTTTAAAACTAA GGGATTCCCCGGGCTGGAGGAATTCTAATTAAGCTTTTTGAACCGGTACC TTTGGGGGGGCCCGGGACCCAATTTTGGTCCCTTTAAGGGGGGAAAATG **GCCCCTTGGC** 

>Sequence 608

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GTTGGGTCCTGTCCAAGGTTAATGGAGGAAGAAGTAGGAAGCTAGGATT
CAGATTCAGATTTCACTATGTAAAGACCTGTTTCCATTATGCCACATTAC
CCCTCAGGTTTTCTGAGGTCTAGGTTGCTTCCTATCTTTTCCTGTGTGTT
CTATCTTCCTTCCATCCTCATGGGCACTCATGGGATACCCCCCTCTCTGT
ATAGGCATCAGAGTCCATTCAAGTTTCCAATGGTCCTGTGGTCTCCACAA
CCTGGAGGTGCAGATCCATTAGAGAAAGGAGTGCAGTTCTGATTTGGACAT
AAGTAACAGGCCCAGAATCACATCCCCAAATGTTCAGATCCAGCCCAGAA
TCCCCAGGGCTTTCCAGCCTTGAGCCATGGGTAGGAAACTCTCTGAGAAG
CTAGAACTTAACCAGCAACTGTTCTTTTAAACTCTTGCCAGTCTGTTTAA
TAAAAGCTTTTGGGTTGTTTTTGGTTTTTTGGTTCACTGGTACCCAGACCTG
CCCGG

>Sequence 609

>Sequence 610

AGGTACATCTTCCTCCATGAGTGGATCAAGAAATATTGAGATGGCTAAGC TGGAAATTACAAAAATGTTGGCATACTATTATAGCATATGGTTATGAAAA TCAATGAATATTTATAŢTTAGTATTATGCTTTAAGTATATATCCAAGCTG

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#### Table 4

>Sequence 611

>Sequence 612

ACGTACCCTCTTTTCCTCCTTTCATGCCCGACATATGCCTTTTTTCCTAC
TTATTGTGTAAAGTTCTTCATTTGTCATGGCCATCGTGAGAAAAATCTGG
GGCTTCCCTTTCATCATAAATGACAGGTTTTTTTTTCTGCTTCCAAAATCT
AGAATTTTCATATTTGTAACACCTGGAGGTAAGGGTCATGGTGTTAATTA
TAAAGAGAGCAGAGAGAGAGAGCATCTGTAGGAAACATCTTGGGTTTTTT
TAATTATTTGCTGGATTCATTTATTCAACAGTTGTATATGAAATGGTTTT
TACACATGAGGTCCTGCTAAGGGTAGTGCTTGCCACCTTCGTGGAGCTTA
CATTTGGCAGGAAGCTGTCTTACACTAGATGAATCCTATGTGGATGTGCA
ACTCAAAAGAAAGGGTTGTGGACTGAGAATCATAAGTTTGGGGGTTATCG
CGACGCAAATAGAAATGTTAACAAACCGTGGGGATCAGGTACCCTGTCCT
TCCCG

>Sequence 613

AGGTACTGCAACCGTAAGTGGGGTATATGGTTTCACCGAGAATGTGACAT CAGAGCAAACACTAACATCAGCAAAGGAGTATCTCAGAAAAGAGCATTTT AGGCACAGGAAGAAATACAAAGGGCTATGGGCCTGTAGCTGGCGTT TTCAAGGGACCACAGAGTGAGGGGAGAAGGAGGACCAGGTGGTGAG AGAACTGGTATCAGAGGAAGTAGGAATCTGTGGGTTACTCAAAGGACCTC GGCCTTTACAATGAGTAACATGGCAAAGTTTTTTTAATATTGTTTAAGCC CTATGACAGTTACTATAAAAGAGTAGCTCACCAGTTCAAGTTGAAATGAA TTAAAAGGGCCTGGCACAGTGGTAGAAAATAATAAACAAAACATAAAAA TTCCTGCCAAAAGAAGTTTATGTTATAGTGGGAAGACAGCAAATACATA TACACACAAACACACAATTTTTTTTTTTAATGGAGTCTTGTTCTGTCTCC CAGCTAGAAGGCAGTGGCGTGATCTCGACTCACTGCAGGCTCTGCCTCCT GGGTTCAAGCATTCTCTGGCTAACCTTCCAAGTACGGGAATACAGGGCCG CAAAACACACTAGGCTAATTTTCTATTTTAGAAAGACGGGGTTTACCATA TGGCAGGGCAGTTTGAACTTCTGACTAAACGATCTGCTGGTTAACCTCC >Sequence 614

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# Table 4

ATAACCCTGAGATGAAGGTGACTCTCTCTCTCAGCTTATTCTGTTATTT
GGTGCAAATACTGACTGAAATAATGTAACCAACACACCACTGAAACTCTA
AGGGAGGAGACAATACTTAGCAATCATGGAAAACCCTTTCCCAATTACGA
TGTTCCCTTACAAACACATCCCTTTCAAGTTGTCAAAAAAATGCCCACCAA
CTGGCCCATGTTTACATATGTAACAAACCTGCACTTTGGGCACATTTCCC
TGGCCGGTTTAAAAAATGGGAACCCCCGGGCTGAGGAAATTTTATTCAGC
TTATTGATCCCCCCCACCTCAGGGGGGGGCCCGGACCCAATTTTTGTTCC
CTTAATGGAGT

>Sequence 615

AGGTGGGAGGATCACCTGAACCCAAGAGGTTGAGGCTGCAGTGAGCTGTG TCTGTGCCACTGAACTCCAGCCTAGGTGACAGAGTGAGACCCCATCTCAA AAAAATAATACTAATAGTAATAACCAGAGCACTTAATAAAAATAATAGCA GCTAGTATATCTAGCCACATACTCTACACTACACACTGTTCTAAACAC GTCTCAAATATCAACTTACTGAATCCTCAAAGCAACCCTCCGGTTCTCAT TCCCATCTTATAGCCGACAAACTGATGCACAGAAAGCTTGAGATGCTTAT GAATAAGGAGTGAGGTTGGGATTCTCACCCAGGAGGCGGGCTGCAGTGTC TAAGCTCTTCAATGCAGGGCCCTAAAAAAGTGCCCAAGAATATCCACTGA GAGACACCCCAGAGCTGCTCGACCCTTTTAGGGCCTCAAGGTGCCTGAGT TGATTTCTGTTGCTTGCAACCCAAAAACCTTGATTGATAAAGCAGATCAC TTACTGGGTTTCACACTTTCTGCCAAACTGGCCGGCACTGCTTTCCAGTG CTGCAATGCGGGGCATCTTACAAATATTTTACAAAGTGGAGTCAGTGGA ACGGGCATTCAGGGGCAGCTGCACTTCAAAAACAAGCATTTTTTCACCCC AGGGGAGAAACCCATTAGAGACCTCCTTGCCCGGCCGCCGTTTTAAACTG GGGTCCCCGGTTGGGGAATTGTTTTAACTTTTCAATCCGCGACCTTAGG GGGGCCGTCCCCAATT

>Sequence 616

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>Sequence 617

> Page 117 of 990 of Table 4

#### Table 4

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>Sequence 618

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CCGGGCAGGTCGGAGGAGGGGAACCAAGGATGCTCATGGAGTCAGCCCTG GAGATTGTCAGCAGACATTGTTTCTTTGGGGTAAACAGGAAAAGGAGAGC AGTGGGTGGCACTATGGAGAGATGGGGTAGAATGGAGGACAGAAAAAGGT GTTCACA

>Sequence 620

>Sequence 621

>Sequence 622

> Page 118 of 990 of Table 4

>Sequence 623

>Sequence 624

>Sequence 625

>Sequence 626

CCGGGCAGGTACTGAGTAGAATAGGACGTGAGACAAGTGCTCTACTTGAA ATAAGCACAGACGTGGAAGAAGGGATGTGTAGTTTTGTCTGGGGATTCGG

> Page 119 of 990 of Table 4

### Table 4

>Sequence 628

>Sequence 629

>Sequence 630

AGGTACCAGGAAGCCCAGCTGTGCTGTAGTTCCTGCTCTTAGATTTCTGT GGGATTCCTCAGAGTATTTTTACAACATCGCCTCATCTTGGGTTTGCCTG ATCTGGGCTGTCCCCTCTACCATATAAGCTGTAACGAACATACTACAG TAGGCAGATCTCTCTGCTGCTTAAAATAATAAAACAATGGAGGCGACAAA AAAAAAAAAAAAAAAAGGACCTTGCCGGGCGGCCGTTTTAAAACTAG GGATCCCCCGGCTGGAAGAATTCGAATTTAAACCTAATGAATCCGGCGA AATGGCCCCCTGGGCGAAACAAGGGCAAAAGCTGTTTCCGGTGGAGAAAT GGTATCCCGTTAACATTTCCAAACAAAATACAAACCGGGAACATAAAGGG GAAAACCTGGGGTGCCTAAGAGGGGGACTAACCTCAATTAAATGGGGTG GGCTTACTGCCCCGTTTCCAAGGGGAAAAACCGGTGGGCCAACTGATTTA AGAAATGGCCCACCCCCGGAAAAAGGGGGTTTGGTTATTGGGGGGCTTT GGAAGCGGTTTTAATCTCCATCTAAAGGCGGTAAATAGGGGGTTCTCACC AAAATAGGGGGGTTAACCCCGGAAAAAAACCTTGGGCCAAAGGGGCCCCA AAAGGCCCAGGAACCCTAAAAGGGCCGGGTTGGGGGGTTTCTACAAAGCC

>Sequence 631

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TTCTGGAGAGACCATTCAAGGCTTCTGGCTCTTGACAAAGATAGACCACT
GGAACAATGAGAAGGAGAGAATCTACTGGTCACAGACAAGACTCTCTTGA
TCTGCAAATACGACTTCATCATGCTGAGTTGTGCAGCTGCAGCGGATT
CCTCTGAGCGCTGTCTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTGG
GATGTCCCTGGACAAGAGACAAGGAGAAGGCCTTAGGATCTACTGGGGGA
GTCCGGAGGAGCAGTCTCTTCTGTCCCGCTGGAACCCATGGTCCACTGAA
GTTCCTTATGCTACTTTCACTGAGCATCCTATGAAATACACCAGTGAGAA
ATTCCTTGAAATTTGCAAGTTGTCTGGGTTCATGTCTAGGCCTTGTCCAG
CTATCCAGAATGCCCACAAGAATTCAACTGGATCTGGAAGAGGAAAAGAA

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ACTGAATGGTGTAACTGAACCCATTTTGATTGAGACCTACACGGGGCTGA TGTCATTCATTGGAAACCGGAACAAACTGGGCTTTTCCCTTGCCCGTGGA ATATTGGTTTTTGAGAGTCTTTTGGGACCCTCGGCGTTTAA >Sequence 632

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>Sequence 633

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ATGGACTGCCAGACAGACAATGACAAGACACAAATACCTTCTGGTGTGTG
AGCCACGGGACATGTGAGCTTCCCCGCTGATGCTCCTCTTATATTAAAGA
TCACTTTCACAAGATGAGCGACTCAATATCTTTTATCAAACCAATGATCA
CCTGCAAGCTATGGTATATTTTTTGCAGCTGTGTAGAGCTATGTGGCATGA
GAATGTGGGACTTATAAATTGCTGATCCAATAAATAGACATTATGGGCAA
CAGTGTCTTATCAGCTAGTGTACCTGCCCG

>Sequence 634

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TTGGCTCCAAGCGAGAAAAATATTAAGTTTGGCACTTGAAACCCTGCTGT
CCAAAAATTCTGAAAAATCATCCTGAAGTTCAAACTTGTGTAGAACTTCT
CCAAGTAGATAGCCACTGGAAAATGCCTTTGCAAATGACTTGGGACTCAC
GGTCCGGGACACCTTCAACTCCTTGTTGAGCCACTGGCACAGGATCTCCG
ACATGGTTCAGCCGGTGCCTCAGACCGCAGGGGGGGCTTAGAAACTCGC
CAGGAACCAAGCCTGCCAGCCCGCGTCCTCCTGTAGCCAAGGGCAACCCT
TTGCTCCCCGCGTACCTGCCC

>Sequence 635

>Sequence 636

>Sequence 637

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>Sequence 638

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> Page 121 of 990 of Table 4

>Sequence 639

>Sequence 640

>Sequence 641

>Sequence 642

>Sequence 643

>Sequence 644

GGCTAACATAGGTATAAATGTTTTTCTGGGGNNANANAAATCACAANGCA CAAAGGAACAATAGGGTTTGTATCCGCGCAATTAATAAAAAAATTAATATC TTAGCGTAGCAATGAAAGAAGTGATAATACTATCTTTGAACTAATAGTAC ATTTATGGGGACTATATTAGCCGTATCTTTACAAACTACAGGAGCGGAAA

> Page 122 of 990 of Table 4

## Table 4

A

>Sequence 645

>Sequence 646

>Sequence 647

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AGGTCCCACCCTTGCAGAATGTCTATCACTAAACTGCAATCATTCTCGCC
AATCTTTAGGGTGGATGGGAAGAGTAATGCCCAAATGAGAGCCCTCCCAG
ATGTTCATAGCAGCGGATATGAAGTCATACAGCCGGGTGTGGTTTTTATT
CCATCCATTCCTCTCCTGGGGACCTTAGACAAGTGATAATGCTCTATGCT
TCAGTTTCCCCCCTTGTAAAAATGGTGGTAATTCCCGCGTACCTGCCCG

>Sequence 648

>Sequence 649

>Sequence 650

>Sequence 651

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>Sequence 652

>Sequence 653

NATATGTGGTCATAGTCTGTGTCCTGATTGGAGCTCCTCCGCGGTGGCGG CCGCCGGGCAGGTGTGGCTAAGACTGGACTGTAGAACAGGGAGAGTATCT GGGGTTGTCCAGTGGGCTCAATATAGTCACAGTCAGGGAATGTTCTCTGG CCGGAGGCAGAGACATGGCAGAAGACTAGAGGCTGAGACTGCCCAAC CCAGTCCTACAGCTGCAAGGAATAATTGAGCCAACTGTGCATAAGCTTGA AGGCCTCCAGGGTGAACCCAGCACCTCAGACACTGGCCCCATGAGACTGA GCAGAGGACCCAGCTGGGCCTGGCTGAACTCAGGCATCTGACTTAGAGAA TTGTGAGATAATCAGTGGTATTTAAACTGCCAAGCCTGTGGTGATTTGTT GTCATGGAAGCAATAGAAAACTAATACAACAGGGCTGGACGCCCTGTAA TCCTAGCACTTTGGGAGGTGGGCGGATCACCTTATGTCAGGAGTTCAAGA TCAGCCTGGCCAACATGGTGAAACCTAGTCTCTACTAAAAATACAAAATT ACAAAATACAAAAATCAGCCGGGCGTGGTGGCAGGTGCCTACCCGCGTAC CTCGGCCGCCCGGCAGGTACTTGGGCCCGAAACCCCCATCTTCGGCGGA GAGACCGTCCGAGGTATTNGTCTGCCACGAATGCACATTCTGAAAACAGG AAGATTTAGTTCCTAAAAATGGGAAGAACCTACTTTGTGAAGAGACTGTT GGCCAGTATCTTTAAACATAATCTTCCAAGAAAGGCTTTGCTCTGGCCTT TAATAGACATGTCGCACAAAAGGATATGGATTCTTGCACTGAACGCCCCC CAAGAGGACAT

>Sequence 654

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TTGTATAAAGTCCCAAGAAGTGCTCCTTTTCCAGAAGGGCTGCTACAATC
CAATCTCAGGAACGTGGACTGTTATCTGAGTTCTGACAGTTTCACTTTTG
TTCCCAGGGCCACACCCCAGTCGCCTCCAAATTCTTTGTATAATTCCAGA
GGCCATTCCTCTGGGCTTATCCTGCTTCCTCCACGCTGGTGAATAACTCC
CACCTCCTGCCCTTTGTCTCTCTATTTATGGCCCTTCTGAGTTCTGGAGA
AGACTTCACTGGGACTTACGTCAGTGAGCTTAACATCTTTCTCATTAATG
AGGAATGAGAGAGAAGGCAACAGGACAATGCCCCCATGGCTTCCACTGTA
AGAAAGTTGAAGACTGTAAATCTTAAAGTTATTAGAGCAGTTGGAAGCCA
CACGGTTTTAACAGTTCTACTTGTGTACCT

>Sequence 655

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TCGCACTGCTGCATTCCAGCCAGGGTGATGGGAGTGAGACCGTGTCTTAA
ACAAATAATAATTATTTGGGGGTGATGTGACAGAAATAAGGACAGAGGTA
TGAAAAGGAATAATTATTTAGCATTTTACTAGCCAGAGATTTGGGCAGTC
CCAAAAAGCAGCTTTTCTAATCTCCCTCTCCTTTCCCAAAAAACTTTAAT
CAGATCCTTTAGTATCCTATCATCTTTGGGTTATTTACATACTACTTTTT
GGAGGGGGGATTGTGGAAAGCTATCGAGATCTTTGAAAGCATTGATGATT
AGCAAGATGATTATTCCTGTAAGAAGCCTTAAGAGGAGAAATGCAAGTGT
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>Sequence 656

> Page 124 of 990 of Table 4

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ATAGAGGCCTGTTTTGTGGTTAACTGTGTGTACCT

>Sequence 657

>Sequence 659

>Sequence 660

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ATTCTCTCTTCAGTATATCTTTTCAAGAACAAGAGGTGTGACCAATACAC
AATAGGCAATCAATATTCAATGAAAATGTTTGTCTCAGAATGAGTAAAGA
CCTCCAGTGATAAGGAATGCATTCCTTTCCAAGGAACCCATTCTATTTTT
TGAAGAGTTCACAACATCAAAAAAAAAGTTCTTATGCTTGAGCATGAATCTA
TCTCCTTTTGACTTGCACCATTGAACTCAATTCTGTGCTTCCAAGAGAGT
ACAATTAAGCTCAATACTTTCACCAAACGACAGCAACTCACAAACCTGAG
GGCGGGTTGAGACTACTCTTCCTCACAGTCCAATCTTCACCCTCTCCAT
TCCTCAGTGACAAGGTTTCCTTTCTCCTCCCTATGCTACTCATTCACCTC
TAGAAATAAATTGGTTTGCCAGACTTTATTTACTCCAGTTCTTCTAATCT
AGATAGTTGGCCTAAATAAAGGGGAGAAGTATAAGAAAAATGCCATCAGA
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TGACAACTGTATTACCTTGGAGATA

>Sequence 661

>Sequence 662

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ACGCTCGTGCACACACGCGAACAGGCACATACGCGAACAACACGGGCGC
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GGCTGGCTCAGTCTGGGTTAAGAATCCCCCTTTGGCCTTGGCATCGGGGC
CCACCGGGTATCGTGTTATTGGGAGTAGTTGCCAGAGATGGGGGAATTG
TGTTCAGCTCAACTGCTAACCGCAAGTAACTCACCCAATTAGTAAATGAT
GGAGGATTTTTCTTTCTTTCCAAAGTTTTGGACTTTTCCTACCACGCTGT
GTACCTGCCCG

>Sequence 663

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AGTGTGCTGTGATTGCTCCTGTGAGTAGCCACTGCACTTCAGCCCTGGCA
ACATAGCAAGACCCTGACTCTAAATATAAAAAAAAGTATAGCGGGCACAA
ATGGGGCGAAGCCAGGGTGGGATGCAGAGTCTAGAGGGAGATGAAGCTGG
AGAGGCAGGCAGTGGTCAACATGTGGCCATTGAAAATAGTTTAGGTTTTGA
TTCTGATGGCACTGGGCTGCCATTAAGGGGTTTGAAGCAGGTCAGTGATG
TGATACAACTAAAGTCTTCAACAGATCATTCTGGAGACAGTGCTAACATG
GACTGGTGGGCAAAAGAGTGAGAAGCCGAAGCCTTAATCCAGAAGGAAAT
GAAATATGTCTGAATTCAGGCAGGCAGTAAGGCTGGAGAGCAGGCATG
GTTAAACAGGACAGCAAGT

>Sequence 664

AGGTACATTTTATATGTTTTATTCTTTCAGGCTTTGTGAGAGGGGGGTTA TTTATTTCATTTGCAAAGCAGTGAATTGAGATCCAGGGATTTGTCCAAGG ATACCACACATGTCATTTCTGCCTCTAGCTCACAGCCACAGTCTAGTCCT TTGATAAGAAGCAATTCCAGAAATGAAGATTCAAATCCCAGCTATTCTGT TCTACTCAAAATATGGCCCATGGACCAGCAGCACTGAGATCACCAGGGAG CTACTTAGAAACCTGCAGTTTCATACTTGGGAGGCTGAGGTGGGAGGATC GCTTGAACCCAGTTTCAGGCTGCAGTGAGTGATGATTGTAATCCTGCACT AAAANTTCCTTCCCGGGGGGCCGTTTTAAAATTTTGGGACCCCCGGGTT TGGGGAATTTTAATTAAAACTTTTTAAAACCCGCAACCCCTAGGGGGGGC GCCCGCCCACTTTTTTTCCCTTTTATGAAGGGTAAAATCCCCCTTTGG CCAAAAAATGGAAAAAGCTTTTTCTCGAAAANAAAAAAAATAATATTATGG TTGAGATTTACTTACATTTCTCATCTAAGTTAATCTTTTAATCAATATCG TGATTCTTTTGTTATAATAATCTATATTAATTAGACGCGGGTCTTTCTAG TTCATCCAGTTATATATAGCATGGCATCTTATTCGATTTTCA

- >Sequence 665
- >Sequence 666
- >Sequence 667
- >Sequence 668

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# Table 4

>Sequence 669

>Sequence 670

>Sequence 671

>Sequence 673

AGGTACATTTTACTTGCTTGATCTCTGATTCCCCTCACTGGGTCACCCGC ACCTCTGAGTGCCCTCCTCACCCTGCATGAGCCTTGACACCAGGCCCTGA GCCTTTCCTCTGTGTGGTTGTCCTCACAGTCCTCTGTGTGGGATCCAGAA CTAGGCACCAAGCTCCCCACGTAGGAGGGTGCCCTCCCCATTCCCTCTGC TGAGGCTCGAACCAGCATGTCAGGCTGCTCCCCCATGTGGACACCTGACT CTCTTTGGGCTCTTACTCTACACTGGCTGTACCTGCCCG

>Sequence 674

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#### Table 4

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>Sequence 676

CCGGGCAGGTACAGATGGGGGGGGTTCTCACTATGTTGCCCAGGATGGTCT GGAACCCCATGCTCAAGTGATCCTCCCACCTTGGCCTCCAAAATGCTG GGATTACAGGTGTGAGCTACCTCACCTGGCCCAGATGACAATTCTTGAAA CACACCTTACAATTTCTGCAGTAGTTTCAAATAACTAATCGCATTCCTAT CTTCACAACCTTCTGAAATAAGGAGAAAAGTTATCTCCACT ATCCGACATCACTCACCCAGGCAATTCACATACTTGGAACCTAAAATCAA ATTTCCTGACTCTTCTTATGACCCTACGGTGTCTATAA

>Sequence 678

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AGCCACGGGACATGTGAGCTTCCCCGCTGATGCTCCTCTTATATTAAAGA
TCACTTTCACAAGATGAGCGACTCAATATCTTTTATCAAACCAATGATCA
CCTGCAAGCTATGGTATATTTTTTGCAGCTGTTGTAGAGCTATGTGGCATGA
GAATGTGGGACTTATAAAATTGCTGATCCAATAAATAGACATTATGGGCAA
CAGTGTCTTATCAGCTAGTGTGTACCTGCCCGGGCGGCCGCTCTA
>Sequence 679

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TTCTGGAGAGACCATTCAAGGCTTCTGGCTCTTGACAAAGATAGACCACT
GGAACAATGAGAAGGAGAGAATTCTACTGGTCACAGACAAGACTCTCTTG
ATCTGCAAATACGACTTCATCATGCTGAGTTGTGTGCAGCTGCAGCGGAT
TCCTCTGAGCGCTTCTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTG
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AGTCCGGAGGAGCAGTCTCTTCTGTCCCGCTGGAACCCAT
>Sequence 680

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GTACACGCTCCAAGAGGAGCCCAGCTCTCTAACTCCGTGAATATAGAGAG
GGTGATCGACGCTCAGCGCATCAGTGTATTTCTGGTACCTGACCATAATA
GTAATTTGCCTACTAACTATGTAACATTGAACAACTACTGTTTTTGTGAG

CCTGAAAAGTTGGTACCT >Sequence 682

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ATGTTCATCAAGACTTACTGTCACACTGGCTAGTGCTGCCAAGCCATCTA
GACTACAACTTATTCTAGATTCACCCTGGAGAGATCTTAGAGGGCATATC
TTCTTCACCCAGAGAAGGCATTTATGCCTTATTGAGGCCTCAGTTTACCC
AGAGGAAACAGCTCTTTCCTATGACCCTGAGAGGTGCTGGTGCTACTCAA
GGCACCTGTGTTCTGGTGCACCTGGCCCTTTAACTAAAAGATAATGGGGC
AAAGGATAGGGTGGGGAGCAAGTGTAAATACCTCATTGTGGAGCAGAGGC
AGCTC

>Sequence 683

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# Table 4

CCGGGCAGGTACAGCCAGTGTAGAGTAAGAGCCCAAAGAGAGTCAGGTGT CCACATGGGGGAGCAGCCTGACATGCTGGTTCGAGCCTCAGCAGAGGGAA TGGGGAGGGCACCCTCCTACGTGGGGAGCTTGGTGCCTAGTTCTGGATCC CACACAGAGGACTGTGAGGACAACCACACAGAGGAAAGGCTCAGGGCCTG GTGTCAAGGCTCATGCAGGGTGAGGAGGGCACTCAGAGGTGCGGGTGACC CAGTGAGGGGAATCAGAGATCAAGCAAGTAAAATGTACCT

>Sequence 684

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TAACAGGGAAGACAGGAGACTATCTGCCTATCTAAAAACACTCAAATTCT
TTTCTATAAGCACTGCTGATTTAATCCATTACACCACCAGCAGCTGCCAG
TTTACAATCTCTGCTACACAAGCCCTCCATTGAGTTTAAAGACACCGTC
AAAATATCTCTCCAGTTTCTCCATTCACCTGACTGTTACCATAGAGAATA
CAGGTATTCCCACTCTGGCCTGTTGTGCAGTGTTTTCTCCTATCAGA
>Sequence 685

>Sequence 686

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>Sequence 687

>Sequence 688

>Sequence 689

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CCGCCCGCCTCGGCCTCCTAAAGTGCTGGGATTACAGGTGTGAGCCACCA
CGACCAGCCAGAGGACACTTTCTTAACAAAATATTCCCTTTAGGGTAAGA
TCTTTCCTTAGAAAAGTTATTCATGAATATTTCTGGTTTCTAGCTAAAA
TATAAGCTTATCATATTTATCAAAATATTTCAATTTAACTCTGAAGATAT
TATCACTTGGAATAAAGTTTGTTAAAAATTTGGAAGAAATGCACAAGTTA
TATTTTGAAAAACAGTTTTGAAAAAGGAGCTATATTTTATTCATATAAATAT

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# Table 4

TAAGAAAATGTTATGAAGTGAATAGTTATCACTAACTATACTAGATTACT
GTACCTGCCC

>Sequence 690

>Sequence 691

AAAGGTACCT >Sequence 693

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>Sequence 694

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TGGTCAAAGAAAATTTTAAAGCAAGACCTGGTCAGTATATTACTCTACAT
TGTCCCAGTGTATCTGCATTAGAAAATCATCCATTTACCCTCACAATGTG
TCCAACTGAAACCAAAGCAACATTTGGGGTTCATCTTANAATAGTAGGAG
ACTGGACAGAACGATTTCGAGATTTACTACTGCCTTCATCTAGTCAAGAC
TCCCAAATTCTGCCCTTCATTCAATCTAGAAATTATCCCAAGCTTGATAT
TGATGGTCCTTTTGGAAGTCCATTTGAGGAATCACTGAACTATGAGGTCA
GCCTCTGCGTGGCTGGAGGCCATTGAGTAACTCCATTTGCATTCATACTC
AACACCCTGTTGGATGACTGGAAACCATACAAGCTTAGAAGACTATACTT
TATTTGGGTATGCAGAGAATATCCAGTCCTTCTCGTGGTTTGGCAATTTAC
TCTGTATGTTGCATACAAGCTTTGGCA

>Sequence 695

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GGGCATTATCTGTGGGCCCGGGTATACTAGCTTCACTTTTGAGGAAAAGT
GAAGCTGGGAAATGTGAGATCTACTCAGTGGGTCCGGGGAAATGTGAGAG
GAGTAAGGAAAGTGAAGACACAGATGTTGTTGGAGGCTCCAGGCTAGCAT
GGTAAAGAGAAAGGGTTTCCTGGATTCTGATTACAGAATGGACCTGTGGG
GGTCTCAAATTGAGGCCTAACAGCATTNTAAAGGAGCAACTGGTAGAACA
GATTTGGGGAAATTTTATGGGTAGAAGAAAGAATTTAGTGAGCTACAGA

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# Table 4

AATAGGTAGAGGCCCATCTATATATCAAGTTCCCGGATGAGGACTACACC
ATACATCTGCAGCTGAATGACTACCTTGGACATATCT

>Sequence 696

>Sequence 698

AGGTACTACGCCAGATGCTGTTTACACATAGAGTTTTTGAGCTGTTTCTCA
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CAATCTTTAGGGTGGATGGGAAGAGTAATGCCCAAATGAGAGCCCTCCCA
GATGTTCAGAGCAGCGGATATGAAGTCATACAGCCGGGTTTGGTTTTTAT
TCCATCCATTCCTCTCCTGGGGACCTTAGACAAGTGATAATGCTCTATGC
TTCAGTTTCCCCCCTTGTAAAATGGTGGTAATTCCCGCGTACCTGCCCG
>Sequence 699

>Sequence 700

CCGGGCAGGTACCTAACCCCGAGTGTTAGCTTCCTTTGCATACTACTGTT CTGAGATGTGTTGGTTGAATTATTAGTAAGGATTTGAAGGCTATGATGCA TTCAACACTCAGTGCGGATTATAGATCCAAGAACACAGACTTTCTTAAAG TATGAGGCTTACAGGACTTTTTGTTTGGCTAATTAAAGTGATAGTCTGTT TTAGAATTCTAATTATTTATTCAGAGGATGGGGTCTTATTATGTTGCCCAG GCTGGAGTGCAGTGGCTATTCACAGGCATAATCTGAGCTCACTGCAGCCT CAAACTCCTGGGCTCAAGCAATCCCCCTGCCTCAGCCTCCTGAGTAGCTG GGGCTGTTTCAAAATTTTAACATTGGTGCTGTAACATACGCACTGTTTAT TGATTAGTTGTGACTGGGGAGAAAATTGTAGAGTCTCTAAAAAACTTAAC

> Page 131 of 990 of Table 4

>Sequence 701

CCGGGCAGGTACACCAACAACAGCCAAGCTCAGAGCCAAATCAGGAAGGC AATACCATTCACAACTGCCACAAAAAGAATAAAATACTTAGGAACACAGC CAGCCAGAGAGGTGAAAGACCCCTGCAATGAGAATGCAAAGCACTCTTCA AAGAAATCAGAGATGACACAAACAAATGGAAAAAAAGTCCATCCTCATGG AGAAGAAGATTTAGAGGCTACTGATTAGGAGTTTCAGTGGAAAGTGGGGT GACAGCAGATAATGAATCTTCTTTAGAACACAGAGCAATTGTTTTCCATT TTTTTTTTTCATGGAAGGGAAAGCAAGTGTCTAATATATCATGACAGC CCCATGTTGTTCTCTAAACACTACTATGCATCCTGAATTTTCTTTGAATT TTGCACTCCACTTATTTTACGTTTGGGAGATACTAAATATTGTGTATCCT GGTTTTGCAAACTGAAAAAAGACTTGGGTGCAGGCAGAAAAGTCAGGGGA AAAAAGAAAAGGTGTTAGGAAGGCATGGTTGAACTGGGTTGCCACTATGG GCAACTGGAGCTGGGCCTCACTGAGAGCTTTGGAGGAACCCAACAGAACA CACTTCTGAGGATCAATCCTTGGAAGGGCTTGAAGGTGGGATATGTATTC TGACCTTCAGGGGGTGCTGACTTCTGCCTCAAGGACCAGGAATTGCTTCT AAGGCATTAACTCCCTGGCACTTCAAAT

>Sequence 702

>Sequence 703

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ATGATGGAACTCTGAACTTGAGGGATGGATGTCAAGATGGAAAGAAGTGA
ACACATTTAAGAAATAATGAAAGAGTAGGTAATATCAGTAAGCCTTAACA
ATGGATTGACAGTAGAACTGAGGGAGAAGCAAAGATCAAGCACAGCCCTT
AAGCTTTAGTCTTCTAAAACTGAATGGACGTTGAGACAGGGAACATTGGA
TAAGTTCCAAGTTGGAGGAGAAACCATTATCTTAGAAGAGGGAAAAAATT
CAAATTTATGCATTCATATCTTTTTCCTCAAAACATAGAAAAAGGGATATT
AGGATATAGAAAACAAATTACCTACTTCTGAAAGTTGCCTTTTTAGATTA
AGGGAAAAGTTATAGCAGTGACTCTATGACCATGATTTTTTGGAGACCCT
CAGCTTAAACATTTCTGGTCCTAATCCTGAATTTAATAACTTTTGCCAG
TTATACAATATTATCTTGCAGCACATGGGGGGCATGCAAATCACCTCACC
CCTTCTGGTACCTGCCCGGGCCGGCGGTATAT

>Sequence 704

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# Table 4

AGGTACACAGTTAACCACAAAACAGGCCTCTCTGAAAAAAGCCATTGCC
ATGGACTGCCAGACAGACAATGACAAGACACAAATACCTTCTGGTGTGTG
AGCCACGGGACATGTGAGCTTCCCCGCTGATGCTCCTCTTATATCAAAGA
TCACTTTCACAAGATGAGCGACTCAATATCTTTTATCAAACCAATGATCG
CCTGCAAGCTATGGTATATTTTTTGCAGCTGTGTAGAGCTATGTGGCATAG
GAATGTGGGACTTATAAATTGCTGATCCAATAAATAGACATTATGGGCAA
CAGTGTCTTATCAGCTAGTGTACCTGCCCCG

>Sequence 706

AGGTACTTGCCTAAAAAGTAGTCTGGCCTTTGCCCTCTGGTGCTGAAAGG
TAATCTATATTACCTCTAAGAGGAATGTCTATGTTTCTGATGGGGGCTTG
CTATGCCAGAAATACTAATCAAGGGATTCGGGGAGGAGCTTTTTGGTCACG
CAGTATCAGCTGACCTGGACACTAAGATTAACCATGTAGACAGTTAATCC
ACCAACCAGTCAATCATGTCTACATGCTGAGGCCCCAATAAAAACTTCCA
ACATCAGAGCTCTGGTGAGCTTCTCTAGTTGGCGATAGTTGGTGCCTGTT
GTCACACATCAAAGACAGCAGAGTAATGAGTCCTGACTCCACAGGGAGAA
GACACCAGAAGCTCTGTGTCTGGAACCCTNCTGGACTTCAACTTACGTAC
CTGCCCG

>Sequence 708

>Sequence 709

CCGGGCAGGTACGCGGGGACGTTAAGAACTGGACTTACAAGATGGATAGG ACCTGGTGGCAGCTGTCCTTGAGGAAGCCGGAGCCTGGAGAGACAGATCT CATGTTATAGCAGAGTACCT

>Sequence 710

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>Sequence 712

GGGGCCATTGAGACTGCCATGGAAGACTTGAAAGGTCACGTAGCTGAGAC TTCTGGAGAGACCATTCAAGGCTTCTGGCTCTTGACAAAGATAGACCACT

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#### Table 4

GGAACAATGAGAAGGAGAGAATTCTACTGGTCACAGACAAGACTCTCTAG ATCTGCAAATACGACTTCATCATGCTGAGTTGTGTGCAGCTGCAGCGGAT TCCTCTGAGCGCTGTCTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTG GGATGTCCCTGGACAAGAGACAAGGAGAAGGCCTTAGGATCTACTGGGGG AGTCCCGGAGGAGCAGTCTCTTCTGTCCCGCTGG

>Sequence 713

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GTAGAAACATCTGCACAGAAAGAGAGACCCAAACAGAAACCAAAATTAAA
CTGTAACACTTTTGACCCTATTAACGGCATAACAGTAAGGAAATCTAGCT
CCTCGAACCAATATACGGGGTCGGCAATCATTGTGCCACAAAGTTTAACA
ATATTTGTAGAGACTATGAAGCCATTTGCTTCATGTCCTCTACTGAAATC
CAATCTTTCCATTTTATTTCCATCCCTCAATCCAACCTGCTACCTGGTAC
CTTCAACACTGTGTCTTTGAAGGATTCTGTAA

>Sequence 714

>Sequence 715

>Sequence 716

CCGGGCAGGTACGCTGGGGTGGAAAACTATGTCCCTGGCAAACTGTCTGC
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ATTGTTCCATCACAGGGTATGGTCAGACAGGTCCAATTTCTCAGCGAGCT
GGTTATGATGCTGTTGCCTCGGCTGTTTCTGGTCTGATGCACATCACAGG
GCCTGAGGTGGCGTGTTTGTCTCACATAGCTGCAAATTATCTTATTGGTC
AAAAGGAAGCGAAACGTTGGGGTACCT

>Sequence 717

>Sequence 718

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ACGAGCTGGACTCTGGGGCCTGCGGCGCTCCAGCCTCAACTCAGAGGGC AACAGTGGTAGTGACAGTAGCAGCTATGACGCACCAGCTGGCAACTC CTTCCTAGAGGACTGCGAACTCTCCCGGCAGATCGGGGCGCAGCTTAAGC TGCTGCCTATGAATGATCAGATACGGGAGCTACAGACCATCATCCGGGAC

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# Table 4

AAGACAGCCAGTAGAGGTGACTTCATGTTTTCTGCGGATCGTTTGATCAG ACTTGTTGTGGAAGAGGGATTGAATCAGCTGCCATATAAAGAATGTATGG GGACCACTCCAACAGGGTACCT

>Sequence 720

>Sequence 721

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>Sequence 722

>Sequence 723

AGGTACTCTGCTATAACATGAGATCTGTCTCTCCAGGCTCTGGCTTCCTC
AAGGACAGCTGCCACCAGGTCCTATCCATCTTGTAAGCCCCCCCGCGTAC
CTGCCCG

>Sequence 724

CCGGCCAGGTACGCGGGGGGACTTACAAGATGGATAGGACCTGGTGGCAG CTGTTTTTGAGGAAGCCAGAGCCTGGAGAGACAGATCTCATGTTATAGCA GAGTACCT

>Sequence 725

CCGGGCAGGTACGCGGGGAGTGGCATCCTTTGAACTCACGGATCCAGTCA TAACTGAAGTTCCATCTACACCTGGGGTCTTCAGACCCAGGCTCTGGAAA AGATCCTGTTACTTACAAGCAAAAGAGAATTCTGGCCTCTTAACCCTCAG CATGNNTGAGTACCTCGGC

>Sequence 726

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>Sequence 727

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> Page 135 of 990 of Table 4

### Table 4

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>Sequence 731

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>Sequence 732

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>Sequence 733

>Sequence 735

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>Sequence 738

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TGAATGCTATCATGTATTCAGTGGCCCACAAGGGCTCCATCACCTAGCCC
TCTGCTCCCTAGTACCT

>Sequence 739

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ACGCCCTGTATGGTCGGTGTCTAGAGCCTCACAGCAACTAAGACCAACCC
AGCTCTCAGAAGAAGGAATGTCAAAATGGTCATGTTCAATTTTACTATTC
ANNGTGCCTGGANNATCTTTTCTTCACCAATTGANNAATGAAATGTGCCT
GAAAGGAGGGNNNGAATCCATGCCTATTAATNNCTTCAGCTCACCAAAGG
GAAATACCTACATTAAGAAGCAAAGACCACCAGAC

>Sequence 740

CCGGGCAGGTACTTGGGTGTGATTCAGGAGTATGCAAGCCTTTCTGCCCC
ACTTTGTTGCCTTGTTAACTAAGGGAGGCTGAGATAAGTCCTCTCAGGTG
CAGTCAGAGTCTGCCTAAGATGGGGGTAGGGAGTTGCTGTGCCTCAGTG
GTTTACTTTCTCAATATAGACTGTTAGCCATATGTGTATTACCTGAAACC
TTAAGGAGAAAGCATTTTTGGCCGGCCTGGAAAGGACACAAGCAAATGTA
GCCTTGATGGTGGAGAAACGTCTCTAGCAGGGCTGTGCATCTGAATCAGC
ATTGAAGCAGCGCCACCTTGTGGTTGATGCTGAATGAGCTATTCGG
CCAGGTTCTGTGATTCTTACCCTGTCTGCATGCTGTTCGAGTAGCTAAAG
TACCT

>Sequence 741

>Sequence 742

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AGGTACAACTTGTCATAAATGGCAGTGTGGGACATTTACATTCTTTTGGT ATTTATCCTCTGCTGCACGTCAAGCNACTATGCCAGACCCGATAGGGAGA GAACCCAGGGTGAGTGTGACCCGGCCTCTGCTTGGAACGAGATGGGTGTC TCTAGCCAGGCCAGGTGCTTACCATGTGCCTGGTGTGGGGTCCATGACAC CAAGCAGGGCAGACCTAGGCATCCTGTTGGTGCAGCTCTGTAAAGGGGAC AAGACAGACAACAACCATGACTCCGAGAAAGTGCAACAGGTGCCACGAG GAAACAGAATTCCAGGACAGGAAGGTCAGGGAATGCCTCTCTGGACCAAG GGGGAGAAAGAACCAGCANGGGAGGGTATTCCTGGCAGAGGGGGCAGTAA CTTGAAGCCTTCAAAGTGGAAGTGTTATGAATTCTTGGAGGGTTGGAAAG GAAATGGGAGCCTGGGAAAGGGGGGCAGCATTTACCATATCCTACCGACG ACAATCTTGAAACTGGGAATTTGGTTATTCCCAATGCATTAAAGCCATTG GTGGCGGGATTTTAAGCCCAGGTAAATGATAGGAAATATTATTTTGAAAA AGATTATTCTGGGTGGCAAGTTAGCTACGTGGTAAAGGGGGAATAATAAA GGGCCCTGAACTAGGGTTTAAACCCTAGTTTTGCTTTTCCTTAAGCTTGG GAGCCAGTTCCTCATTTGGAAAATGGAGCTAAGGATCCCCCCTAATAGGG GTAAGGTTGGTAATAGAATAGGGGCAAAT

>Sequence 743

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CCGGGCAGGTACCCTGAGCCTCCTGTGCCATTCTTGCTAGCTGGACAGAA GACATTGCTACTGAGCCAAGAAGACTTGATCTCTCTTACACCGAGGAAGA AGGGAAGGTCTGATGCAATGAAACAGCACGTTGCTTATAATTCTAGATCA GAACCATAATAGTAATTTGCCTACTATGTAACATTGAACAAACTACTGTT TTGTGAGCCTGAAAAGTTGGTACCT

>Sequence 745

>Sequence 746

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>Sequence 747

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#### Table 4

>Sequence 748

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>Sequence 750

>Sequence 751

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>Sequence 752

>Sequence 753

>Sequence 754

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## Table 4

>Sequence 755

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CGACCAGCCAGAGGACACTTTCTTAACAAAATATTCCCTTTAGGGTAAGA
TCTTTCCTTAGAAAAGTTATTCATGAATATTTTCTGGTTTCTAGCTAAAA
TATAAGCTTATCATATTTATCAAAATATTTCAATTTAACTCTGAAGATAT
TATCACTTGGAATAAAGTTTGTTAAAAATTTTGGAAGAAATGCACAAGTTA
TATTTTGAAAACAGTTTTTGAAAAAGGAGCTATATTTTATTCATATAAAATAT
TAAAGAAAATGTTATGAAGTGAATAGTTATCACTAACTATACTAGATTACT
GTACCTGCCC

>Sequence 756

>Sequence 757

>Sequence 758

AGGTACCCAAAAGAGCATCATCGAGTATGGAAAGTCTTTCAGGACAGCCT TCAGATGTGTAATTCTTAGGAGGAATCCTAATTCCTTAGTATGCCAGGCC TCCAGAGTCAAGCAAATGTTTAAATTTCTTATGAGAGATTTCTCCACTTT AGGGGC

>Sequence 759

CCGGGCAGGTACGCGGGGGGACTTACAAGATGGATAGGACCTGGTGGCAG CTGTCCTTGAGGAAGCCAGAGCCTGGAGAGACAGATCTCATGTTATAGCA GAGTACCT

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#### Table 4

>Sequence 760

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TCTCTCTTTGCCTGAAGCTTTAGATTCCCTTTCGATTCAGGGTTCCTTGT
TTGTGGCTTGGAGTTGGCCTCTGAGGTCTCTTGTGCTTAAAGATTCCATG
ATTTATGGCATTTATGTAAACATTGAGGACACACTCAGCTCTGCACAGG
ACAGAGAGGAAGGAGGAGATACAGGCTGGCATGGCTCTCAATTCCAAGAC
GGTAACAATAATGTTAGTGGGGGAGGCAACACACCCAGATCAACTCCT
CTGCTTCTTCTGTTTATCCTGAAACACCCTTAGGCCATGACTGCAACTCA
GCACAAGATTCGCTCCTGCATCTGGCTTGTAAAGATTGGAAAGGATG
GCACAGCTTGGGATGAAACTGCACAGAGGACCTGGACACTGAGCATCAT
CCACTGAGATGGCCACCCCACAGCAACTGGCATTTTACT
CCATATTAGGCTCAAAGTCCTACAATCCTTGCATCTATTGCTGGCTTTTT
GACGGGGGGGCTGTAGCCTGAAGCCATCAGTGGCTTCCAGGGCTTTTGGTT
CTTCTTCTGAAAAAATGGGAAACCTTTTCCCTTCAAATAACAACGTTGGTG

GAGGATTCAAGGAATAGACTTGCCCGGCCGGCCGATTTAAAATAATGAAC TCCCGGGGTTGAGGAATCCCTTGTCAGCTTAACGTTCCCATTGCCTCCAG

GGGGCCCGGTCCCACTTAAGTCCCCTAAAAGGGG

>Sequence 762

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AGGTACAAGGCTGCCCTTTCAGAACAAACCCAGGACGTTCATTATAAAAT AGCGAACTGGCCTTCCAGCACTTGATGGGAATGCTGAATAATGAAAATGT GGTGTGAAATGTCTCGAATATTTATATTTTACATAACCAAGAGCANGGGA TTCCAATAGGGCTTTGAATTTTAGAGAAATTACAATGAGTAATTTTAGTT CCTGAGATTTTAGAATATGATGCTAGTTTGTAAGCAGGGCAAAAGGCAAA

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## Table 4

AGTCTCCCAGAAGCAACTATAATGTGTTTGAATTATAATAAAAGATTTAG TGTCCGAAAACCATTTTTTCAAAGCCAGGAATAGGCCAGGTACCTGCCCG >Sequence 764

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>Sequence 765

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TTTTTTTCCCCCTTGTAAATTTCTATACATGTCAAAGGCTACCAACTCA ACAAGGTAGAGCTGCCTAGCCATGAAGAACGCCAGGGTTTTTGTAACCCC TGGTGTGCTTTGCACGCAGAAGGCACACACTTAAATTGGCATGGCTCACT TTTTTTACTGTGCCTTTGCTGAGCTTGCTGCAGGCTGAGTGCACTGGTAG AGGAGTGCAGGGCTGTTCTGGCCATCCCTGCCTGCTCAGGCCTCTCCT GCTCCTTTGTGGATCGCCCAGGTCTCTGCTGCTTCCTGGTGCTGCTCCT GGATCCTCTTGACATTTTTCCGTTCTGTAATTTGATTGACAGTTACAGAC AAGGAAGGGGACTGAAATTCTTACCGTTTTGTGACTTCCTAAAACGGGAA AGGAAATTTGGTGAATGAGAAGGGGAAAACGCCCTTTTGGCTGAAATTAT TTACAGGATTTAACCCCAGGTTTAATGTACCTCCGCCCAAGTACTCTTAA ATAACATCCTTGTGGGCTCCCTAGTGCCACTGCACAAAACGAGCACAATT GCCACACGCCAGGTGTTTAATATGGGAAAAATCCCCCCGGGCACATGT CGCCAAGAAGTTACCAGCTTGTTCAGGGTTTCATTCATATGGCAATCTGG CCTATTCACAAGGAGGCTATGGGGCTGGGNCGGGCCGGTAACCTGCCCG GGCGGGCCGTTTAAGAACAAGTGGATCCCCGGGCCTGAAGGAATTCT

>Sequence 767

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## Table 4

>Sequence 768

CCGGGCAGGTACCAGAGGAGGAGATGGACGATCAGAGCCATGCACCTGTT
TCCTGCACCCCTGCGCACTGGTTCTATGGCCACAAGGAGTCTTACCCAG
TAAAAGAGTTTGAGGTGTATCCTGAGCTGATGGAAAAATACCTATGTGCC
GTTCCCTTGTGGGTTGGACCCTTTACGATGTTCTTCAATATCCATGACCC
AGACTATGTCAAGATTCTCCTGAAAAGACAAGATCCCAAAAGTGCTGTTA
GCCACAAAATCCTTGAATCCTGGGTTGGTCGAGGACTTGTGACCCTGGAT
GGTTCTAAATGGAAAAACCTGGCTTCAACAT
CAGCATTCTGAAAATATTCATCACCATGATGTCTAAGAGTGTTCGGATGA
TGCTGAACAAATGGGAGGAACACATTGCCCAAAACTCACGTCTGGAGCTC
TTTCAACATGTCTCCCTGATGACCCTGGACAGCATCATGAAGTGTCCCTT
CAGCCACCAGGGCAGCATCCAGTTGGACAGTACCT

>Sequence 769

>Sequence 770

>Sequence 771

AGGTACGCGGGGACATTCAGAGGTGAGCCCAGAGCGGGTAAAGTGGACTG GGGAGAACTTCGGAGGATGTTCATGTCCAGGAGCAGCCCCACGCCCTGTA TGGTCGGTGTCTAGAGCCTCACAGCAACTAAGACCAACCCAGCTCTCAGA AGAAGGAATGTCAAAATGTCATGTTCAATTTTACATTCAGTGCCTGGAAT CTTTTCTTCACAATTGAAATGAAATGTGCTGAAGGAGGTGAATCCATGCA TTAATCTTCAGCTCACAGAGGAAATACTACATAAGAAGCAAGACCACAGA TACCTGCCCGGGCGGACGCCCGGGCAGGTACATGACAAGGTGCGGCTCCC TACGCCCGTACCCTCTTAAAGGCGTCTACATGTGCACTGAGATGACGAGC GATTAACTGTGGGGGGACTGAGTGTGGCCATGACTGCCCAACAACTGA GGGTTTTTTTTTTCTCTTGAGCTCTGGCTGGGGGCTGGGGGACAAGGGTT TTACCTCTTGGAGGAAATATGGGCCTAAAGCCCAAAAAGATGTTTTTGTA CAAAGTCTTTTCCCTGAAATTAACCTTGCCAAGTGTTCGTTTAGGC CAATGGCGGCACCAGTTTCTACCTCTTACAAGGGGGTTTTAAGTTTTTGGA ATCCCTGGGGGCAGGAATGAAATAAAAGTTTACAAAACCGGCCAACAGG GGGGGCCCGAATCAGGCCGTTGTGGCTTTATGAGGGCATACGCG >Sequence 772

> Page 143 of 990 of Table 4

#### Table 4

>Sequence 773

>Sequence 774

AGGTACGGGAGGTGATATGAGCAAATTTAAG'IATGCCTCTTACTCATGTT
TCCCTGTCCTCCAATTTTCTTCCTCAGAGGCAACCTCTCTAACACATTTT
TGTGTTTAAATATATTTTTTTGCATGAACAAATATACATGTGTATTTTGTAT
ATATGCATATATATTTTCTGACTTTTTTCCTTCTTTCAAAGAATTATTAG
TGATATTCTAAGCTCCAGTAACACACAGGGAAAGGTGGCTTGCTAATAGT
TTTTTTGTGTAATTTTTTTGAGACTGGGGCTTGCTCTGTTGCCCAGGCTGG
AGTGCAGTGGCACGATCACAGCTCACTGCAGCCTCTA

>Sequence 775

>Sequence 776

AGGTACATCCCCTGGCCATAGGAAGCACCTATAATATTAGTAGTTATCAT
TACTATTTTTTTGCCTGTGTGCGAAAGTCATTAGGAAAATCATGCCTATC
TACGGCCCATTCTGGGTCTTCAGAAATGTTGACACAGACATCCACTTTTG
CCGTTGTGTGCTAATGGCAGGAGCTTGCCTGGCTTCCTGCTGTGCCACAT
GCTGCTCTTGAGGAATGATAACAGGTACCTGCCCG

>Sequence 777

AGGTACGCGGGGGAGTTTCTAAGCCCCCGCCTGCGGTCTGAGGCACCGGC
TGAACCATGTCGGAGATCCTGTGCCAGTGGCTCAACAAGGAGTTGAAGGT
GTCCCGGACCGTGAGTCCCAAGTCATTTGCAAAGGCATTTTCCAGTGGCT
ATCTACTTGGAGAAGTTCTACACAAGTTTGAACTTCAGGATGATTTTTCA
GAATTTTTGGACAGCAGGGTTTCAAGTGCCAAACTTAATAATTTTTCTCG
CTTGGAGCCAACACTTCACCTTCTGGGTGTGCAGTTTGATCAGAATGTGG
CCCATGGCATCATCACAGAAAAGCCTGNGGTGGCAACAAAGCTGTTATAT
CAATTGTACCTGCCCG

>Sequence 778

TAATCAGGTTGTGCCAGAGGAGGAGATGGACGATCAGAGCCATGCACCTG
TTTCCTGCACCCCTGCGCACTGGTTCTATGGCCACAAGGAGTCTTACCC
AGTAAAAGAGTTTGAGGTGTATCCTGAGCTGATGAAAAATACCTATGTGC
CGTTCCCTTGTGGGTTGGACCCTTTACGATGTTCTTCAATATCCATGACC
CAGACTATGTCAAGATTCTCCTGAAAAGACAAGGTAAAAACCAAGAGGGG
CTCACAGTACCT

>Sequence 779

AGGTACGGGAGGTGATATGAGCAAATTTAAGTATGCCTCTTACTCATGTT

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## Table 4

TCCCTGTCCTCCAATTTTCTTCCTCAGAGGCAACCTCTCTAACACATTTT
TGTGTTTAAATATTTTTTTGCATGAACAAATATACATGTGTATTTTGTAT
ATATGCATATATTTTTCTGACTTTTTTCCTTCTTTCAAAGAATTATTAG
TGATATTCTAAGCTCCAGTAACACACAGGGAAAGGTGGCTTGCTAATAGT
TTTTTTGTGTAATTTTTTGAGACTGGGGCTTGCTCTGTTGCCCAGGCTGG
AGTGCAGTGGCACGATCACAGCTCACTGCAGCCTCTA

>Sequence 781

AGGTACATTACCCTACGCTCCAAGCGCAGCAAGCCGGCCAATATCCGTGG CACCGTGAAGCCCAAGCGCAGGAAAAAGCGTGCAGTGGCATCGGCTGCCC CAGGGCAGGAGGCTTTGGTCGGACCATCCCTTCACCGCAGGAAGCGGCAA GGGAAGCTGATGCTGTAGCACCTGGGTACCTGCCCG

>Sequence 783

>Sequence 784

CCGGGCAGGTACAATAGATGGCAGGTTCTAAATCAACATCAGAGCAATGT TATGGTCCAGGAATGTGACATGGGTTGAATATCTTCTAACTGGACTTAGA AAACCAGAGATCTATAAACATGTTTGGAATTCCAACTTTCCTCCACCCTG TTTCTGCTACCAGGGCACATTCCACGTTGATCTCTTGTATGCCGATCAAC ATGATTTTATTGCTTTTTGTCGCACATTTTAAACACTGATTTTCACAGAG CTGCCTCAAGGAAGATGTAAGTAATTTACTTGTAAAAGTGAGCTGAGCTC TCAGGAGAAATTCAGCCTCATGCTTCGTTCTGATGGATTTCAGTTCTCAA TCTGTCCGGGACAGTCAATTAAAGATTAAGTTGGAATTGAAGTGAAACCT TCCAAGGCTCGTTTAGGTAGGGCCAGACACCCTTCATCAGGCCCAACAAG GGATGGGGATAAAGGATTTGGACCTGGCTCTTCTCCTGGGGATGCCAGAG AAGACTTCTCTAGAAATAAATAGCCTCCCACTCGGGTAATTCCTCAGGTC ATACTTTTACCAAAAGATGCCAGAAATGGCCCCAGCCTTCTTGGTAAAAA TTCTTAATTGGAACAGCCCTTTTAAAGGGGAACCCCTGTAAAAATGAAAT GAGAATATGTGGGTGTGCACAGCATATAGGGCCATCCCGGCATAAGGGAC CTCGGCCGTTTTAAAAAAGGGGATCCCCGGGCTGTAGGAAATTTATA >Sequence 785

> Page 145 of 990 of Table 4

### Table 4

CTTCTTCTGAGAGCTGGGTTGGTCTTAGTTGCTGTGAGGCTCTAGACACC GACCATACAGGGCGTGGGGCTGCTCCTGGGCATGAACATCCTCCGAAGTT CTCCCAGTCCACTTTACCCGCTCTGGGCTCACCTCTGAATGTCCTCGCGT ACCTGCCCGGGCGGACCG

>Sequence 786

>Sequence 787

AGGTACAGAAACTCTGCCAGCCAGCCATTTTAATGTTGATTTCTTTACTT ATATTTAAACTTCTAAATAATAATAACTACCATTACTGGGTGCTTCATTT ATGTTGGACACTCTGCTAGGTGTTTGTATGGTATTTCATTTCATCTCCCT GTTGAAAGCTATAGATTAGGCAGAGAAGCTCAGAGAGGTAAAGTGAATTT CTGAGAACACAAACTTCTAAATGGAATTGGGATTTGTGCTTAATTTTAAT CTGTCTGACTTTCACAGTCATCTTCAGTATGAACAGAAGAAAATCCCTGA ACACCTTTGAAATTTAAAGCAAATTAAAGCAAATACTATGCCATTAGAGT ATATACATATGAATATGATTCACTCCCTGTGAACTCTGCTGTATTCTCCT ACCTCTAATGTGCCTCGCCTCTGCTTCATTGGGAAGTAAAAAACCATTTT ACTACCTGNGAATTGTGAAGCTATCTGGTCCTTTTTAAAAATATAACACT CTTCTGAGGACTTTCTGATGCTGGGATCAAATGATGGGGAGAGGAATCTC TAAGAAATTATATTTGAGGTTAACCTCATGTTGGCATTGATCATTCTGGG CTTATTTATTAGAAGGCAAAACTTTTACACATTAATTGCTTTTGGTTAAA GAACTTTCCTTTGGTAATTATTAATTCGGTGATGGATAATAAAGGCCCAC CGGCTGTTAAAATAAACCTGTATGGTATTAATGCTGGTAAAATAAACAAT TCGTATGAAAGGGGAATTTTTAAAACCAAATTTATAT

>Sequence 788

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>Sequence 789

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>Sequence 790

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### Table 4

CTTGCACTTCATGCTGGGCAGAAAGAGCATAACTCTGGTCTCAGGGATGA
AAATCTGTGGGGATCCATGTGCCTGCCCGGGCGGGCGTTCAGGATCTTGG
TGATCCCCCGGCTTGGAGGAATCGAAGAATAACCTTTTGTATACCCGTCA
CCTGAGGGGGAGGCCCGGTGCCTAGAATTTGATAACCTTAGAGGAGGTTA
TATGCCCCACTGGGTGTAATCATGGATAGAGCCAAGATCTAGGGAGCAGG
GGCGTATAAAGGATGAATCCTGGGGGCGCTAGAGGAGTGGCCATTCACTT
ATAGGGCCCGAGGCGCCTGACTGGGTATCCTGAACACCATTACTTTCCTT
ACGCCTGACTTGGACCATGATAGGGGAGAATCCTCATTGAGCAATTCCTT
ATGTTACCTTCCTTTCTTCAATGTGTGTGCATTTGTCCTTTCTAATTTTT
TGCAATATAAAGTAT

>Sequence 791

AGGTACACAGTTAACCACAAAACAGGCCTCTCTGAAAAAGCCATTGCC
ATGGACTGCCAGACAGACAATGACAAGACACAAATACCTTCTGGTGTGTG
AGCCACTGTACATGTGAGCTTCCCCGCTGATGCTGCCTCTTATATCAAGA
GATCANCTTTCACAAGAATNNGAGCGACTCAATGATCTTTTATCAAGACC
AGATGATCANNCCTGCAAGNNNTATGGTATATTTTATGCAGCTGTGTAGA
AGCNNTATGTGGCATGAGAAATGTGGGAACTTATAAATTGGGCTGATCCA
ATAAATAGACAGTGTATGGGCAACAGTGTCTTATCNAGCTAGTGTNNA
CCTGCCCGGGCG

>Sequence 792

>Sequence 793

>Sequence 794

> Page 147 of 990 of Table 4

TTTTTTCATGAGGATGGCTTTTTTTCCCATTTGTTGGGCAACCTTCGAT TCTTTGGAAAGAGCCTTTGCTTTTAATTGAAGGGGTTTTTACCTTTTTGG GTGGCTTGGTTCCAAAAATTTTTATCTTTTTGGGCAAAGAAAAGGATGG CCTTCCGATATGGCTTGACCTTGGCTGTAGGGAACCTGCCAGGCGGGC

>Sequence 795

>Sequence 796

>Sequence 797

>Sequence 798

CCGGGCAGGTACGCGGGGAGTGGCATCCTTTGAACTCACGGATCCAGTCA
TAACTGAAGTTCCATCTACACCTGGGGTCTTCAGACCCAGGC

>Sequence 800

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# Table 4

>Sequence 801

CTGCAGCGCCGCGGTGGCGGTCGCCCGGGCAGGTACAGTGAAGCTTT GACCTGAGGAGCTCTTCTGTAGGTGAAGAGTGGTTAAC

>Sequence 802

AGCTACTTGGGAGGCTGAGGTGGGATGACTGCTTGAGCCCAGGAGGTTGA GGCTGCACTGAGCCACAGTCACGCCACTGCACTCCAGCCTGGGTGACAGA GCAAGACCCTGTCTCTAGTTTTGTCCATCTGTCTTCATGGTCCTAGCTGA AAAGTATCTTTTTAGATTCCCTATTTCCTTCGACTTCCCCCCCAGAAT ATAAACTCCATGAGCTCCTTGTCCACCCAACTCTCTGCAGTCTTCTGTAC CT

>Sequence 803

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>Sequence 804

AAĞAGTAAAATCAAGGCTGGTAAAAGAACACAGCACGTTTCAAGCCTAAG CAGCTTAAGTGCAAAGTGGCTCCGGGTGGAAATGATGAGAGAGCAAGAGC ACAAAGAGGACCCTCTAAAACAGAGCCAGTGACCATGTGAGCTGAGGGGG AGGGCTTCTCACAGGGCAAACGGTACCT

>Sequence 805

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>Sequence 806

>Sequence 807

>Sequence 808

>Sequence 809

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# Table 4

>Sequence 810 {
>Sequence 811

>Sequence 812

>Sequence 813

AGGTACCAACCTGGTCTCCAAAGTCCTCTGGGAATTTCCACAATACCACA GGATCTTCATTTTCAGAGGCATGACATTTCACTTTCAACACCAAGTCAAA GGTTCTGTCTGGATTTGCCCTCTGACCAGATTCTGCTTGTACTCCCTTAT CTTTGTTCCTCAATCTGCCAGACATTGTAGAACTTAAAACAGTCCTTGGA GTTCAGAACAAAGAATAATTGAAGCAGAGTGTCACCAACAGATGGTAATC AGTGGAGTCAAATTTTCTTCAGGAGATTCTTTGAGGATTCTCCTTTGGAC TTCAAGAAAGAGTGCTGTCCCGCGTACCTGCCCG

>Sequence 814

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AGGTACAAGGTCTGAGGAGAAGGTTGAGGTCTCCCCAAGACTTCTCTAGA ACACTTGGTGAGAGGCCCATGAGGACAGGTGATGCTTGGGCTTATAGCT CTGACTCAGGACATCACTGCTCAACAGCCTGAAGCCCACATCCAAAACTC ATGTCATGCTGGCAATTGAAGGGGTAGCAGGAGCCCAAAAGTCCAGAGGGG CTCAGCACAGGGAGCAGATGTCTGTGAGCAGGAGACAGCGGCTGTAGG GATCGATGAGACTTGGTAAGCATGATGTCTCTTGTCAGCATAGCATCTT TGAGCTCACACAATAATTGATGTAGAATTGTCCATTTCAGTAAGGAGTTT CCACATCCACTATCTTCCACGATTCTCACAAGGGCCTTGAGTAAATATTA CCTGCATGTTATGGGTGAGAAAGGGTAGTTTAGAGAGCTGAAAGGATTT GGTGAAGGCCACATAATGAGTAAGCCTGAAATCAAGGGACCCCCA

GGCTTCTAAATGTTAGTCTTGGGCTCCTTGGTTCATGGGACTATTATCAT CCCTTGTACCTGCCCG

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#### Table 4

>Sequence 816

AGGTACTCACATGCTGAGGGTAAGAGGCAGAATTTCTTTTGCTTGTAAGT AACAGGATCTTTTCCAGAGCCTGGGTCTGAAGACCCCAGGTGTAGATGGA ACTTCAGTTATGACTGGATCCGTGAGTTCAAAGGATGCCACTCCCCGCGT ACCTGCCCG

>Sequence 817

CCGGGCAGGTACGCGGGGGGACTTACAAGATGGATAGGACCTGGTGGCAG CTGTCCTTGAGGAAGCCAGAGCCTGGAGAGACAGATCTCATGTTATAGCA GAGTACCT

>Sequence 818

CCGGGCAGGTACAAACCTTTGCCCTTCTCAAACCTTTGCTAGATAAAATC
ATATCAGGTTTTCACTTACATTTAAATCCTTATTTAGGCATGTGTGCAGC
CTTAATTTCCATATTTTAAGCTATATTGCAGGTTACTTATAGCAATGCTA
GAATTCAGTGAAATATAAAATAACACTTTTTGAGACCCACTGAAGATTGTA
AACAAATGCTTAAAAATTGCAAAAGTGTAAGTAGGCAGATGTTAATAGCA
GTAGCAATCATGCATGTATTTCATTAAAATTAAAAATCAGTTTATATGGA
AATCTGCAAATGTGCTAAAGACTTTAAAGGACATCTTCATCAGAGTTCTT
TGTGACTTGGAGAGAGAACACCTTTGGAGAAACCACTGTACCT
>Sequence 819

GTAAAGGCGGCACATAGTACCTGGGCCG >Sequence 820

>Sequence 821

>Sequence 822

CCGGGCAGGTACTGATAGCTGGGCAGTCTACTGAGGCTTAACCTTGTGGT

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TAACTACTTGGAAAATACAGAATTGGCTAGTGAGCCACAGACCCATTTGA GGCCAAGCCATATGGCAAGACCTTTGGGAAATAGGTCATCAAAAAGAGGT AACTATTTATCATGTGTCATGCCATATGCCTTTGGCCACCCCTAGTAATG ATGGGGCACATGCCTTGGCTAAGGTCAGATGGTCAGAGTCAGCACCAACA CAAGATGTGACCTTGTGGCTACACCGGAAACTGGGACATGCAGGGGGTAA ACATTTGTGAGGCTTGTCAGAAATGCCTGGCATGTGTTCAGACATATCCT AAAAAGAGGCAGCTGCCCGGTGTTATACAACAAGTAACAATTGGGTGAGT GCCCTTTGACCAGGTGGGGAAAGTGACTAACATTCGGCCGCTGCCAAAGT CCCGAGGGGTATCCGCATGCACTAACGGCTGTAGACATGGCCACAGGCCC TTGGTGTTACCTACCCTTGGAGGGGTGGCCAAACCAACAACACCATTCA GGGCCTTGAACACTTATGGTTCCTTGTTGGGTTGACCTTTGGCCATTGAG AGGGAATAGGGGAACACATTTTATTGGACAACAGGGCCCTTAGGCGGTTT AAAACTTTTTGATCCCCTGGGGCGGAGGGAGTTCTTTTCCAAATTATCAA ATCCGGGGACCCTAAGGGGGGGGCCGTGCCCCAAATTTTGGTCCCTTAAA **GGAGGGGTTATTG** 

>Sequence 823

>Sequence 824

>Sequence 825

>Sequence 826

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>Sequence 827

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CAGCAGTAAGTTACCCATAAGTAGCTACACAGAGAAGACATCCATGGG
AGAGGCTTGTGTGTGTAACCAGAACTGCCTGGGTTATAAGTATATGAAC
TACAAGACTAGGCATCCCTAAGACACAATAAGTGCTTTTTTGGAGCAGTGC
TGGAGTTCTTGTTCTACACAGGAGAGGGTAAAAGTCAGTGCAGTTCAAGT
CACTCCTGCCAAAGAATGCTTGGTAGCCATGGGCTAGTGAGACCTGCAGA
AATGCACATTGCACAACAGTTTAAAATGTATTGAAGACCTACTCAATGCT
TGTCACTAAAGCTGGATTCTGAGGGGAGTATGCAATGTCTAAGGCACTGC
CTGGACATTAACTGAATGAACAAATGCATGAATGGATGAACATATTAAGA
TGGTAAAACACATCCCAAGGCCAGGGGTTCTCAAAGTGTGGCCCTGAACC
AACAACATCAGCTTCACCTAAAAATTTGTTAGAAATGAAAATCCTCAAAA
CCCACCGGAGACTTATGGAATCGGAAACTTGAGGACAGTCTTGTTTAATA
CAGATATTGAAACAAAGCCCTGCAGGTGACTGCCCTTATGAGAAGCCCCA

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## Table 4

AAAGAATGGGGCATGCCAGGAGGAGGACCGAAGATGCCAAAAGAGGAAGG CAGAAAATCAAAAAGTGGGAGGGGATTCAAAACAATATTTGCAGTTATTT AAGGCCGTCCTTACCTTTTGGCGTTTTTTGAAAAAACTATTCTTG >Sequence 828

>Sequence 829

>Sequence 830

>Sequence 831

>Sequence 833

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# Table 4

TGTTATAGAACTTAACCGTCATTTTTCAGAGAGGTTTTCTCTCACTACCC
TATCCAAAGTGCTCAGTGAATGTTAATTGCTGTCATTTATTAAATGAGAT
GTCCCTTGTTATTCTTTGGCTGAGCAGCCTGTATTTCCTTCATAGCATTG
ACCACATTTTGAAATTCTTTTGTTTATTGGCTGGCTCTACAGCTAGAATT
TAAAGTTTTGTGAGTCCCGGAAACTTTGTCTTTTATTTACCCCTGGTTTC
CCATAATTTTATAGGCGTTTTGGTCCTTGCCCGGCGGGCCGTTTAA
>Sequence 834

AGGGACCAATTCCCAACCTGCGACTCAAGAGGTATGGCTCGCTGCTGGAC CCTGTGGAACTGTGACTGATGTGAGCACGTAAACAGGCTCACTCGGTG GAAGGGGAGCAGCTAAATGGAGCAGAGCCAAGTCATTTTACTTGAGTCTG GCCCTCTCAGACCAGCCGTCAGCCAGCTGACCAAAAATGTGTTAAGACAG AACAGCCAACATCAGCAGAGCCACCTACCTAACTTGTACCTGCCCG >Sequence 835

NCNGACGGTGGGCGGCCCGCCCGGGCCAGGTACATGACTGCCACATTTG
TTTTAGTATTGATATAGAGCACATTACATAGCTTCATAGGAAACAATTAA
TTTCATCTATTAAAGGAAGCCATAAGAGAAAACCTCCAACTAAATCTATC
ACTGATTGAACCTATAAGCCCAGAAAAAAATTTAGCTTCTTCTTGCCTCG
GTTTATCTACATTAGCTCCTGAACGAATACACTGGGGCAGGAGAAAGTC
ATTTTCTAGTCTTGTTGCCATACAAACTTGAGTTCTTCTCCCTGAATAAC
AGGAGTAACAGTCCAATTTTACCAGAACACCAGTTCTGAGAGAATCACT
GAAGGAACAAGGTATCACTTCAGCCACTGTCTTTCTCTAAAAGTTTCTTT
CAGGGATGATACCTTAATTTATTTTTCCATTGCCTTTCTCTTCTCTAA
AATACTAAGTATACACCAGGTTGGATAAATAATTGGCATTCAGTAAATAC
ACTTATTATTATCTTTTTAATCCATAAAGATCTTTCTCTTTTTTGTTGGG
GGTTATTTTTATGACACGGTCTTGCTCTGTCACCTGGGCTGGAGTGCAG
TGGCACTCCACACCAACATGGTTCACTGGAGCTTTGACCTTCGGACTTA
AGGCAATCTTTACCTTGGACGG

>Sequence 836

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>Sequence 837

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>Sequence 838

CCGGGCAGGTACGCGGGGACATTCAGAGGTGAGCCCAGAGGGGGTAAAGT GGACTGGGGAGAACTTCGGAGGATGTTCATGTCCAGGAGCAGCCCCACGC CCTGTATGGTCGGTGTCTAGAGCCTCACAGCAACTAAGACCAACCCAGCT

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# Table 4

>Sequence 839

>Sequence 840

>Sequence 84

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>Sequence 842

>Sequence 843

GCTCCACCGCGGTGGCGGCCGCCCGGGCAGGTACTTTCTTCAGGGTATCC

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## Table 4

TGTCTTGGTAGTGAAAGGAAGAGGGCCTGGTCCCTGGGGCAGTGCATAAG GCACTTTGATCATCTCACTGCAAATGTCATGTGAGGTTTCATGGAA GTATTAAGAGATCCAATTAAGAAGAATAGTTCTGAGTCTAAACCAGCCCA GAGTGGCTTCTCTAGGGGAAACTCCCCGCTCAGCTGGTACCT

>Sequence 844

>Sequence 845

ACTCACTATAGNNGGCGATATTTGGAGGCTCCCACCCGCGGGTTGGGCGG GCCCCGATGGTAACCCCCAACGTTNAAAGAACGGTTAGGGTCAAAGGTGG TAGCCCATTGAGGGTGGGCCAGGAAAAGGGGCTACAATTTTCTACCCCAG AAAACTACGATAGCCCTTATGAAACTTAAAGGGTCGAAAGGTGATTTAGC

>Sequence 846

>Sequence 847

AGGTACATTACCCTACGCTCCAAGCGCAGCAAGCCGGCCAATATCCGTGG CACCGTGAAGCCCAAGCGCAGGAAAAAGCATGCAGTGGCATCGCTGCCC CAGGGCAGGAGGCTTTGGTCGGACCATCCCTTCAGCCGCAGGAAGCGGCA AGGGAAGCTGATGCTGTAGCACCTGGGTACCTGCCCG

>Sequence 848

>Sequence 849

ACACGGAGCTGCACCGCGGTGGCGGCCGGGGGCCATTGAGACTGCCATGG
AAGACTTGAAAGGTCACGTAGCTGAGACTTCTGGAGAGACCATTCAAGGC
TTCTGGCTCTTGACAAAGATAGACCACTGGAACAATGAGAAGGAGAGAAT
TCTACTGGTCACAGACAAGACTCTCTTGATCTGCAAATACGACTTCATCA
TGCTGAGTTGTGCAGATGCAGCGGATTCCTCTGAGCGCTGTCTATCGC
ATCTGCCTGGGCAAGTTCACCTTCCCTGGGATGTCCCTGGACAAGAGACA
AGGAGAAGGCCTTAGGATCTACTGGGGGAGTCCCTGGACAAGAGACA
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GAGCATCCTATGAAATACACCAGTGAGAAATTCCTTGAAATTTGCAAGTT
GTCTGGGTTCATGTCTAAGCTTGTTCCAGCTATCCAGAATGCCCACAAGA
ATTCAACTGGATCTGGAAGGAAAACTGATGGTTTAACTGAACCC
ATTTTGATTGAAACCTACACAGGGGTGAAGTCATTTAATGGAACCCCAAC
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TTTGGTACCTGCCCGGGGGGGCCGTTTAA

>Sequence 850

AGGTACACATACAGTTTTTAAACCTAAAGTTACTGGTGAAACAAGCTTGC TATTACTGAGATGTATAATGAATGTCCTAAAGCTATAAATCCACTCATCG TTGTGTTTAAGGAGGAACTGAAGCACAATTGTTAAGAACAAGTGAATTAG GTGAATATACATTGACAAAAAGGTTGATAATAAAGTTGTCAGAATTTCAAA

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>Sequence 851

CCGGGCAGGTACAAGTTACCTACCCTTTCCTTGCCTCAGTTTCCTCTTT GTGACAATGGGGACAATAACAGAAACTGCCACACAAGAGGGATGTTAGAG AACTGACCAAGCGAATGTAAGTAATGACTTGGAGCAACGTATGGCTAAGA GTAAGTTAGGGGTTGTTACGATGACTTTCCTGAGATAAACAGGGAGATC >Sequence 852

CCGGGCAGGTACGCGGGGACGTTAAGAACTGGACTTACAAGATGGATAGG ACCTGGTGGCAGCTGTCCTTGAGGAAGCCAGAGCCTGGAGAGACAGATCT CATGTTATAGCAGAGTACCT

>Sequence 853

CCGGGCAGGTACTTACCGGGGAGCACAGTGGACTAGGGGATGCCCTTGAT AATGACGGTTTCCTAGGTGCAAGATCAGAGCATGTGCCTACACCTTGTGC CCTGATGCCGAGGTGGAGACCATTGGGAAATAATTAATAGATATTTTTCT GGGGGGAAATCACAAGTCACTGAGGTGTTTG

>Sequence 854

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>Sequence 855

CCGGGCAGGTACCCAAGCTTCACAGCCCTGTCTCTGCCATGGAGAGCAGG CCCACACACTGCTGCTGCTGGAGCAACCGTGCTGGTCACAGGGCCAGAG GCAGAGAGCCCTAACAAGCAGTCAGGGCGCTAATGAGGAAGGGGGGACAA CCTGTCCTCTACAGAAAATAATGAGATTAATATGTTCAACAACTCCCATC CAGAATCCAGCAGGAAGTTAAACCAAACGACACATGATTCTCTGACGAAG AAATAAGAATACGGTTGACTGGTTTTTTATATTTATTTTACCTGAAAGCTT CTAATGTTTCTAACTAGTGACATATTTCAGGCCAGGAATTCTGTTTGCCT AGATCATGATGTCTAAACACTGCACACTTGACCAACTTTGGATCCAAATA ACTAGCTTTGTATGCTCTTGGGCCCTGCAGTACCT

>Sequence 856

>Sequence 857

CCGGGCAGGTACGCGGGTGACGGTGTAACAGGTTCAAATAAAGATTAA
AAAGTCAAACGTGCACCAAGGCTCTCCTCTGAGGCCAGGCACAGAGCTAG
GAACAAAGGCCAAGTCATGAGCTGGCCAATCTGCAATATCGTGAATACCC
TAATCATCCTGGTTTATTTACAGGGTGGAGCTGTATGATCTGTAAATTCG
CTTCTACATTTACATTTCTGTGATTGATCATTCAGCTAATTAGAGTTTGT
TGGAATGTCAAAATGTTATGGGAAAAGACATCATGAGCCAAGAACCATGG
GACTGGGAGTCTAAGCCACAGAATCTGCTCATAGGCCACTATACAACCAA
ACAGGAGGATATTATGAGGGATTTTTTTGTGTCCAACTTACATTCACTCCA

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CAACTTTNNTTTATTTTTTTTTAAGAGACGGAAGTTTTTTTGCGCCCA AGCTGGAAAACCTAGGCCGTTCTAAAACTATTGGATCCCCCCGGCTTGAG GAATTCGATTATCAAGCTTATTGATACCGTCAACCG >Sequence 858

>Sequence 860

>Sequence 861

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#### Table 4

AGAGGCCTGTTTTGTGGTTAACTGTGTGTACCT

>Sequence 863

AGGTACCAGGTTGGGCTAAGAGATGAAAAACCAGGCTGAAGTTGGGCCAG
AGATGGACAATGAGTCACTTCCACCAGAATTCCCAGCCACATATGCCCAC
CTCTGGGTCAGAAGAGCCAAACGTATTTATCGCTTTTGCTCAGGGCCAAC
ATAGACACTTGATTCTCTCCAGGGCTGTTTTTCCCCCAAATGTATCAA
TACATCCCTATTTTCTTCCCCCTTTGTTTTCCTTCCCTGGTGACCTGCT
ACCCCACACCCCAGCACACTGATGGTGTTCCCTCCACCACACCGAGACCC
CGCCACAAGCTCTCAGCCCTCGTAGAGCACAGGCCCCACCCTGAAAGTTG
GCAGAGCACCGGGCTATCAAGCTGTGTCATGTGGAGCCAGCAGCAGCCCGGC
ACAACCGTGGATCCCGGGTACCTGCCCG

>Sequence 864

CCGGGCAGGTACCTGTCTTTGGGCTTTATGTCATGTAATACTCACCCCAG TGACCTTTAGGGGAGATGTCACCGTCGTCGTCGTCATCATCATCGTCATC ATCCCGACGTCATCGTTCCTATTGAGAAATGAGACCACTGAGGTTTGGGG AGGTGAACTGACTTCCCAAGTTCTTACAATGAACAGCAACAGGGCTGGGT GGGACATAAATCCATTTCACTTACAGTGAAAGCCAAATTCTTTATTATGC TCCACATGATCCTGTCCCTGCATCTCCTGACCTCTGCCCCCATCCCCCTC CCGATCACTCACCCACCACCACTGGCTTGGCTGTTCCTCAAACACACCA GGCAGCCTTCAACTCCAGGGCCTTTGCAGAGGTCATTCCTTCTGCCTGGA ACACTTTCCCCCAAACGACCGCATGGCTTACTTCAAGAATGTGCTTAAAT GTCATTCTTTTCAGGAATCTTTTTGCGACTTTCCTGTTTAACATTCTAA CACTGTCCACCTTCACCACCTTTGGCCTGCATTCCGGGGACGTTGGGAGA ATGAAAGGAGGACCTTGGCCGTTCTAAAACTAGGGGACCCCCGGGCCGT AGGAATTTTAATATAAGCTTATTGATCCCCGCCACCTATGGGGGGGCCC GGTCCCCACTTTTGGTCCCTTTAAGGGGGGGTAATTGCCCCCTGGCGAAA CATGGGCTAGCTTTTTCCGGGGAAAATGTTATCCGTTCAAATTCCCACAA CAACAATCCGGGGCATAAATTGTAACT

Sequence 865

CCGGGCAGGTACTGGGGATTGATTAGCCACAGTCTTTGCCACAGACTCTT TTGGACTGAGCCGATAGGTCAAAGGTTAGCTTATGCAGTAGCATGGGCTG TAGGTTTTTTGCACTGATCAACACCGGAACTTTTAGAAGACTTTTAGAAG CTCAGTCCATGCTGTCCCTCCGTGGGCCCACTCAAGCGAAATGGGTCGAG CTGCAACACTGTGCGGTGCCAACCGGGAGAAATCTGCCTATCGGGGCTGA GAGACATCCTGTAGTGGCTACCCGTCTCCTTTGCCCCAAATGTCAAGTGG AAGAGGTGCTTCACATATTTATTTCTTCCTACATGGGCTCATTTATTGTA AGCCCATTGTGACCCTTGGAAAGCCAAGCTTTTATCTTGATTTTGGAGTG TGATCAAGGTGACAGTTGTTCTCCGGATGACAGGAATCTGACTTTGGTTT TGCTTTTTCCATAGAGGTCAGTTGGCCTCAAATTTGGGCCAATTTGCATT TGGAGGAGACCTCCAGGACCGAAGCCTTGTCCTCATTAGCTAATTGGTCA GGCAGTCTTTCCTGGGTGGACAAAACCCTTTTTAGATTTTTCCTTAAACC TCGTTTGGTTGGCCAAGGCCTGCCTGCTTTTTTTTTTGGGAAAGGGCCTGG TATTTGTGGGGCCTGACTCCAGGGGCGGTTTTTTTTCCAAAAATTCCTTT TCCCCATAAACAGCCCTGGAC

>Sequence 866

CCGGGCAGGTACGCGGGAGACTTTCCCTGCCGGCACATGGACCTGGCCC AACCCTCACAGCCAGTAGACGAGCTGGAGCTCTCGGTGCTCGAGCGGCAG CCAGAAGAGAACACGCCTCTCAATGGTGCCGACAAGGTCTTCCCTTCTTT GGACGAGGAGGTCCCCC

>Sequence 867

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#### Table 4

TAGCAGCCTGCTCTTCCAGCCAGCGCTCATTCTCCCCTGTTTTA
TTTTTTATAGCATGTCTCATCATCATCTGAAATTACCTTTTTGTTCTTCGTC
TCCAGTTTCCCCGGTAGAATTTTGTAAATGCCATCAGGGCTGGTGTGCCC
TTTTCTGAGTATTCCCAGTACCT

>Sequence 868

>Sequence 871

CCCTTTGGAGCGGCGCCCGGACAAAGAACAAAAATCCTATTTTTCTGAT CNGAACCCTGGCTGAACGGTATTAAAATTCAGGTTCCAAAATGAGCCAGT GGTAAAGAAGAAATAGAGTGGAAATTTAACACATCCATTTATTATACACT GCAAAATGCAACAGGGACAGATGCCCCATGATATTTCTCCTCAGCTGTGA TCACTTTCTCTACAATGTTGAACTAGTGGCTCTTGCTCTAGGGACTATCT GGACAATTACCTGCAACTTGGAGTCATTACGGAAATGATCGTTAAGGAAC TGGCTCATTTGGGTTACACTCCTCTGTTCCTAACTTCCTGTGGAAA CAACTCTGGGACTTAAACTTTTCTTAACCAATTTAGAAAAATGTGCCAAT AAAATTCTAAAATTTAAAAAGAGTTTATAATTGTAATTCTAAAATGCACT GAAAAATGGCGGAAATTTCCACTTTTTTTTGGCAACACCTGATTTTAAAGT

>Sequence 872

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ACCTAAAATGTGCTCCTAGTCGCATAGCTTCTCAGAATAGTCAAAGAAGA
AAGGAAAAGAAAGCTGGATGTCCCGGGTTTATTTTTTCTGCATCTTTGCA
AATATGAGACACACTCTGTTCCAGGAGCTTTCGATGCGCTTCTACAGGT
ATTTCTTTTTCTTTGTGTCAAGGATAAATGTGAAGATAGCTGTGGAATT
GTCCGAACATTTTTGCCTTGAAATTAAGCAATGTTTTATGCCTAATTTCC

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## Table 4

CAAAGGACAAGTTATTTATGCCAGTATTAAAAGCAGCAACTTATATATTC
TACGCAAAACAGAAAACCAGAAAGATCTAAATTTTGACAAGTCCCTAGTT
TGATGAATTGAAAGACAGGAAGATGACTACATCACAGCAGATAAAAGAGA
ATTTTTCATAAACTAAGCTCTGGGAAACAAAATACCCAAATTACCCATGT
ACACCAACTACTGCTCATGGGTTCCCCAAAAGACCTGGGTGCGGATTATA
CGAGTCATTGCCCAGTTGATAGTCTCAGTTTGAAAAGCATTATCTTTA
CCCCTGGGCAAGAAACCTTTAACGTATTAATTCTTTAATATTTGGACCCT
TTTTTATTAGTTGTAATTCTTTTTCCAAGAGAACAAAACTTCAAATTATT
GTTTTT

>Sequence 873

>Sequence 874

>Sequence 876

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#### Table 4

CCGGGCAGGTACGCGGGATAGCATTCAGCTCCCAACAGAACCCTTCATTT
TCTTTTTATGTAATTTCTCTTTAAAGAACAACTGGTCAGGTCTAGTGTA
TGGAGAGCCCTTGTGAGGACAGAGCCCTAATATCTGGATGATGTTTCTGA
ATTTAGTTGACATTGTCCACTTGGATGTCTAGTGGTCATTTTAGGCAAAC
ATGTCCAAACTGAACTCCTGTCTCCCTGGACCCTGCCTCCTGTGGCCTG
GCTGTCTTAGTCAGTGTCAGCCCTCCATGAGCTTAGGCAAAAAGTCCTGG
GGTTATCTCTGACTTCTCTACTTTCCACAAACCATATCAAGCTCTCAG
CAAGTCCTATTGGCTCTGCCTTCAAGTGTAGATAGAATCTGCCCTCTGCT
TATCCACTGCGTTGCTGTTACTCGGCACAAGTTGTTACCTCCTAGTCTG
TTTTCTGTGCAGCACCCAGAGCTGGCCTGTTAAAGCATAAATCAGATCAC
ATCACTTCCCTGTCCCAAACCCTCAAACAGCTCGTGCTTCACTCTGAAGA
AAACCCCACATCACTGCTTCTTGGGCTTCTGGCTTTAGATCAGTGTAGAAA
ACCACAGGACCTATGAAGCCTCGCCC

>Sequence 878

>Sequence 877

>Sequence 879

> Page 162 of 990 of Table 4

GCATCGGCCTCCAAAGCGCTGAGATTACCAGCGGTAGCCACTACGCCTTG GCCTTCAAACAACCTTGTTTGGGTTTAAGATTTAACCCAGACCCCGGGG GCACCTTTTTTTTTGGGGCCCGTTTAAAGGAAC

>Sequence 880

AGGTACCCATGAACATAGTTTTTACTCTTTTTAAAAGCTGTAGGCACTGG
AAGGTCAGTGTTCAGCCATGACAGTGGAAGGTCAGTGTTCAGCCATGACA
AGGCCCAATGTCATGGGCCCTCTGTCATCATCCTCTGTCCGTAGTGATCC
CCAGACACTTTTGCATGGCTGTTTAGACAGAATTTTCCTGCAGCTCTTTT
GGGAGTAGCTCTTGAAAGTTTAACCCCTGACAGTTAATGAAGAACAGTGA
GGCTTAGGAGGCAGGTAGGCCTTTGAGCAAATAACTCTGAGCAACTGGTT
GCCATTGTCAGTTCTCCTATCAAGTATGCGTTTGATTTTTAAAAGGATTC
CCCAAAGTTCTATTTAGGACTACAGAGTCTCTAAGAATGTATTTCTGTTG
GCAAGGTCAGGAGCAAGATCATCTCTGTGGACCTGTCGGTTTGAAAAAAGT
TGCAAGATATTCTCATTATTCATTGATTTATACTCAAAAAACATATAT
TTGCATGTGCCAAGAAAAGGTAAAGAGGAAGGGAGCCTTCATGTGCCAGCCC
CTGTGCTGAACCCTGGAGCTGTAAAAGATGAATCTCTTTTCTTGTCT
GTAAAAAAATTTGCCGATGGGACCAAGTCTGGCATCTCTTTTCCTGGCCT
GACCGAGGACAAACCTTTTTAGTTACCCTGNGATTCCCATGCATTCCGCA
GTAAACAGCTGG

>Sequence 881

>Sequence 882

>Sequence 883

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>Sequence 884

CCGGGCAGGTACAGACAGGGTTTCACCATGTGGGCCAGGCTGGTCAACTC
CTGACTTCAACTGATCCCACCTGCCTGGGCCTCCCAAAGTGCTGGAATTA
CAGGCGTGAGCCACCACGTCTGGCTGGAAAATGTTTGTGGTTTATGCCAC
ACTATTTATCTGGGCTTTTGTAGGTTCGTGATCAAGCAGCCAATCATCTG
CCTGGGCAACCTCCTACTTAGACCACACCTCCCGCGTACCT
>Sequence 885

GGGGGACCTCCTCGTCCAAAGAAGGGAAGACCTTGTCGGCACCATTGAGA GGCGTGTTCTCTTGGCTGCCGCTCGAGCACCGAGAGCTCC

>Sequence 886

>Sequence 887

>Sequence 888

>Sequence 889

>Sequence 890

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#### Table 4

>Sequence 891

>Sequence 892

>Sequence 893

CCGGGCAGGTACCCATGAACATAGTTTTTACTCTTTTTTAAAAGCTGTAGG CACTGGAAGGTCAGTGTTCAGCCATGACAGTGGAAGGTCAGTGTTCAGCC ATGACAAGGCCCAATGTCATGGGCCCTCTGTCATCATCCTCTGTCCGTAG TGATCCCCAGACACTTTTGCATGGCTGTTTAGACAGAATTTTCCTGCAGC TCTTTTGGGAGTAGCTCTTGAAAGTTTAACCCCTGACAGTTGATGAAGAA CAGTGAGGCTTAGGAGGCAGGTAGGCCTTTGAGCAAATAACTCTGAGCAA CTGGTTGCCATTGTCAGTTCCCCTACCAAGTATGCGTTTGATTTTTAAAA GGATTCCCCAAAGTTCTATTTAGGACTACAGAGTCTCTAAGAATGTATTT CTGTTGTCAAGGTCAGGAGCAAGATCATCTCTGTGGACCTGTCGGTTTGA AGGAGTTGCAAGATATTCTCATCATTCATTGATTTATATACTCAAAAAAC ATATATTTGCATGTGCCAGGAAAAGGTAAGGAAAGGGAGCCTTCATGTGC TTGTCTGTAAAGAGTTTGCCGATGGGACCAAGTCTGTCATCTCTTTTCC TGGCCTGACCGAGGACAAGCACTTTTTAGTAACCTTGGGAATACCATGCC **TTAAGG** 

>Sequence 894

GGTGTGGTGGCTTATGGAGTCCCTAACGTTTGCACAAAATGGTTGCTACA TTCCACACTCCCATGTGCCCTGAGCAACCTCCAGGGAAACTTCAGATACC

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## Table 4

GTGGGGCTTGCCAGCTGAGCTGACCCAGCGATCCTTTCTATCACA
GCTTTGATCTTCACTGGGTTGGGAGCCTGTCTGAATCTAAACATCTGCCT
CTCTACTGCCCACCCCTTCGGCATTTCCTAGCTCTCCCTGAAAGGTGCAA
ACATGCATGCAGTTACTCAAACAGAATATTTATCCTTAACTCCCTGTCCC
TCACAATTTCTTTTAAAACAATCCACTATTGTCTACCCCCGCCCCCGCAT
CACCCTTTCATCCAGGTGCCCATTCCCTTCTCTCTAGTCCTGCAATACCT
AAGCATCGATCTGCCTTTAGCACATCCATCCCCGCCTTATTCTCCACGCA
GGAGCTGAGTGACCTGCACAAAATCCCCTGCTAAATACGTACCT
>Sequence 895

CCGGGCAGGTACACCATGTCCAGTGATTCATGTCTGGACAGAGGCTAAGT CTTGGGTCACTCGCTTCACAAAGAGGCATCACTGTTCACTCAGGGGCTCC TACCTGAATCCCAGAGCAGACGGATTCAAATAAATGCACCAACCTCTATA GACCTGCCTTGCAACCTCAAACCTCTTGGGGTCAAAAGCAAGAAGAAATG TTTATGATCCTAGATTGTAGGGGAAATAATGGTGATTTTTAAAAACACAA TTCCCCGCTGGGCGCGGTGGCTNACACCTGTAATCCCAACACTTTGGGAG GCTGAAGCAGGCAGATCATGAGTTCAGGAGATCAAGACCATCCTGGCTAA CACGGGGTTTCCCCATGTTGGCCAGGGCTGGGGTCGAACTCCGGACCTCA GGTGATCTACCCACCTTAGCTTGCCAAAGTGCTGGGATTACATGCCTGGA CCCTCAAGCCCCGCCGTTTGTATTACATAGTGGATTTCCCAGGTACCTGG CAGAGAACCAAAATTGTGCATCTCTTTATGGTAGGGGACAAAGCGGGCTC CGGTTATACTATGGCAATAGGAGAAAGGCTCCCCGAAAATTGATTCCTTT GCAAACACCCAAACATTTTTGTTCGTGAAATTATAGGGTAAACCCGGGGT GCCTATAGAGGGGGCTCCACCAAATAATGGGTGTGCCTACACTGACTAAT CCATTTGGAAAACCCTGTTG

>Sequence 896

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>Sequence 897

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>Sequence 898

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#### Table 4

ATCCCTGAATITATTTAATTGCTACGTGAGTGATTTTTGCCCCACAGCAC
TGGAAGATAATTGGAATGCATTCTAGCTTATGTGCTCTGGATAATATGCA
ATTACCAGCCAGCTGGAGAGTAGTATGCCTTTGTCTCACAATGTCTTGTA
ATTITAAAAAGTTTTCTCCTATTTGCTGGAGTCTCTTGGTACCTTTCTTA
CGGCATCATATATCTACTATGGGGTCCTTATGTCTGAATGTGTAGACACT
TCTTTTGGTATACTGAATAAACTTCTGGCGATGAGGGAAGACACCGCTTT
TGTTTTGTGAATGCCTGTGGCAGTTGGGCCCCCCATTAAACCCTACGGGAA
TTCAGGGGGAGCGGATTTTT

>Sequence 899

>Sequence 900

AGGTACCAGGTTGGGCTAAGAGATGAAAAACCAGGCTCAAGTTGGGCCAG
AGATGGACAATGAGCCACTTCCACCAGAATTCCCAGCCACATATGCCCAC
CTCTGGGTCAGAAGAGCCAAACGTATTTATCGCTTTTGCTCAGGGCCAAC
ATAGACACTTGATTCTCTCCAGGGCTGTTTTTCCCCCAAATGTATCAA
TACATCCCTATTTTCTTCCCCCTTTGTTTTCCTTCCCTGGTGACCTGCT
ACCCCACACCCCAGCACACTGATGGTGTTCCCTCACCACACCGAGACCC
CGCCACAAGCTCTCAGCCCTCGTAGAGCACAGGCCCCACCCTGAAAGTTG
GCAGAGCACCGGGCTATCAAGCTGTGTCATGTGGAGCCAGCAAGCCCGGC
ACAACCGTGGATCCCGGGTACCTGCCCG

>Sequence 901

>Sequence 902

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CGCGATCAGCACGGTGCGGGTGCTCCCCGGGTGCAGCGTGAATCCGTTCA
GCGGCAGGCTGACCTCGAGCGCCATGCCCGGCTCGAATTCGTCATGCAGC
ACGCGCAGCCGCCACCCCCCTTCCTCGCGCTGGACCGCGATGCGCAG
CATTCCGCCCTCCTCGCCACCACGGAATAGGCGTTGCGGTGGCGGGCC
CGGCGCGCAGAGTGAATGCAGTTCGACGTGGGCTGCCACGGC
GGCAGCGGCGCGCCCTTCCGGGGCAGGCGGGATTCCCTGACCACTGG
GCCGTGGCGGACGAATGGCGTTATCAGATACATCATGAAGTCAGCCATG
ACTCACGCCTCTTACCGGCGGATTGAACGGCGGGCGTCAGGTATTCCC
AGTCCAAGCGCTGTGGTGCGCGGCGCAACAGCCAGCGTTCGGACGCGAAT
TGAAAAAAGGTACGGTGGCAGCGTAAGGTCGCCAGG
CAGATGCATGACCCTG

>Sequence 903

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## Table 4

GGGGGACCTCCTCGTCCAAAGAAGGGAAGACCTTGTCGGCACCATTGAGA GGCGTGTTCTCTTCTGGCTGCCGCTCGAGCACCGAGAGCTCCT

>Sequence 904

>Sequence 905

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CTTCTGTGTCCTGCTAGGAATGTTCTAGCATAAAGCTTTTAGATGCTGTC
CGGGACACTAACGTCAGGATTCTGCTTGCTGAGAAGGGTTAGGAGCTGGC
TGTCTTGAGACAGAAACACTGAGTATGTTTTGAGTTTCATGGAGATGAAA
TTGTCCCTGGGAAATTTTTTGCCTTTCTTTGAGAGCCCACCAATCAGAAT
AAACCCTACACAGGAACAAAAGATTGTTGCCGGGTGCTGTTTGGTTGTG
CTTCTCATTAAGCCTGTTCTGATGGGAAAAGTTTTTTGGGCTCCAACCTGC
AAAGTAGGAAGGACTTGTTTGCCCTAGCAAAACTGGAAGGGATTGAAATG
ACTTATCTGAGGTCACACGCCTGGCCTTAACCATGGCAGGGTCCCAGTTT
TCCTGATCCCATCCTTTGAATACTTAAATTTCCTG

>Sequence 906

>Sequence 907

>Sequence 908

AGGTACAGTTGTTCAGGGTGAAGATTTTTACAGAATTCAGTAAGGATGGA TTATAATATGCTGAACATTTGGTTGCTTTTGTAATAATAGAGGTGGACAG CTGAGACAAATCTAGACAAAATCTTACACTGACTGTTTTGTAACGACATA CGAATGACCCTGAACTTTTTAAGTAACTTAAGAAATAGGCCGGGCACGGT GCCTCACACCTGTAATCCCAGCACTTTGGGAGGCCAAGGCGGGTAGATCA

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#### Table 4

>Sequence 910

AGGTACAAGATCTGTCACTTGGTTTCAGATCATAGCTGTATGAGTGAACC
TTCAACCCATTAGTGACCTGAAGTAGTCTCATGAGTCCCAGATAAATGTG
CACCTACAGTGCTGCCCCTCAGTTAAACCCACTCCAGGGCCTTGTTTTTC
CCTGTCTTTACCCAGTCCACATGGACCTTGCACCTTGGTTTGAGTTAATC
TCACTCTCACAGCCTTTATTTCTTTCACATTCAACCCTCATTTGAAGTCA
CAAACAGGAGCTTCTAACCTCCCAAACTGTTTTTTTTAATCTCCGCCTGT
GACCTCAGGAGTTGCAGCTCTAGGCCTTCTTTTTCAGACTGTTGCCTCCC
TTGCATAATGCTGACATCACGTTGTAGTAGTGGTAAACCTGTGCCTGGAT
TGCATTTCAATTGTTGCTAGCCCTAATAGACTAGGAATGCCAATTTCAGAG
AGGAGGACTAGAGCAAGATTGAGAAAGAAACAGAACCGAACAGGCACTGT
CCTGAGTCCTGTTGAAGGTGAAAGGAGAAAATTGTATACCCTTTGGAAG
>Sequence 912

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>Sequence 913

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>Sequence 914

AGGTACAGCCTGTGGACCTGAGGGTCAACTAAACCTCTTATCCTGATAAA TTACCCAGTGTTTTCCACTGGCTATGACATACCCAAATGGAAATATCAAG TAAGCAGTTGGATATACAGGTCTTGAGTTCATGAGGGAATGAAACCAAAG

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## Table 4

CTGGAGGTAGTAAATCTGGGAACCAACCACAGATAGATGGGATCAACACC
AAGCTAATACATACAAGGATCTGCTATTTAAATACCACTTATGAACCATG
CTAATTCTATGATCTTGAGAAAATAACGACCTCACTCCCATCTTC
>Sequence 915

CCGGGCAGGTACCTCCTTTTTAACCTCTAGCTGATCTTGGAATTTCTTTT
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AAGAAGCCCACTCTCTAGAGAGAAAAGCAAGACCTATAATATTGAAGATT
TGAGAAAAAGTTAAATTGTGATAAAACATGCTGATTTCTCACACTGACTT
AGGAAAAGCACCTAAGCCTCAAAAACGAGAATTGTCTTAGGAGTTAATGC
TGTGGCTATTCTTGTCCTGGCATTTGGGTGAATGCATGAATTCTTTATTT
CAGTTTATAGAATAAGATAAACTATCGAGAACTTCAGGTTGCTGCATAAT
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>Sequence 916

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CACTGGAAGGTCAGTGTTCAGCCATGACAGTGGAAGGTCAGTGTTCAGCC
ATGACAAGGCCCAATGTCATGGGCCCTCTGTCATCATCCTCTGTCCGTAG
TGATCCCCAGACACTTTTGCATGGCTGTTTAGACAGAATTTTCCTGCAGC
TCTTTTGGGAGTAGCTCTTGAAAGTTTAACCCCTGACAGTTGATGAAGAA
CAGTGAGGCTTAGGAGGCAGATAGGCCTTTGAGCAAATAACTCTGAGCAA
CTGGTTGCCATTGTCAGTTCCCCTACCAAGTATGCGTTTGATTTTTAAAA
GGATTCCCCAAAGTTCTATTTAGGACTACAGAGTCTCTAAGAATGTATTT
CTGTTGTCAAGGTCAGGAGCAAGATCATCTCTTGTGGACCTGTCGGTTTGA
AGGAGTTGCAAGATATTCTCATCATTCATTGATTTATATACTCAAAAACC
ATATATTTTGCATGTCCCAGGAAAAAGGTAAGGAAAGGGAGCCTTCATGT
>Sequence 917

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>Sequence 919

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> Page 170 of 990 of Table 4

ATGGTCTCAAACTTCTGACCTCGTGATCCGCCCGCCTCGGCCTCCCAAAGTGCCGGGATTACAGGCGTGAGCCACCGCGCC

>Sequence 920

>Sequence 921

>Sequence 922

>Sequence 923

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>Sequence 924

>Sequence 925

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>Sequence 926

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## Table 4

>Sequence 927

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TCATCTTCATTTGTGGTGCTTGGAAGCTAGGCAGCTCTTTAGAATTATCC
AGATGCCCACTAAAGTTCGAGCCATTCGCCATCTGGAATTTCTTCCTGAT
AGTATAGATGCTGGTTCTAATCAGGTTCTTGGAGTACCT
>Sequence 928

AGGTACAAGCTGTTCTCCCGCAGCAGCCTGTGAGTCTTTCTCTTGACCGT CTTGTTCAGGAGCTCTTCCGCTCTGAGAAAACCAGCAAGGCCTCTCCAAG CGCACCGAGCAGGAGGCATCCCGTGGTTGCACTGGTCAGGATCGCATCAA ACAGCAATATTGATAAGCCAGCTGTGATTATCTTCTTTACCTTGGCACCG AGCTGAAGATCTGTTAGAAACCCTCTCCAACCAGGACTTTCAGGAGAAAC GGTGGCCACCGCCCAGAATAACAAGGCCCCAGCAGCAAGGTGTCCTTTTTC CCAGCAAGTGAAACCTGCCCCCCGCCACCACCTGTCCCCGCGTACCTGCC

>Sequence 930

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>Sequence 932

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>Sequence 933

GAGCTCTTGCTCTGTAATAAGAGCTAGAGTGGATGGGCCTGACCCTAGAT GTTTTATGTAGATGAGGTCTTGGTTTGAGAGAAACAAGGATTGGGAAAAA AGTGGAGCAAAAGTCAGACACCAGGGTCCCCACTTAATTTTTAGCCCTTG GTCACCACAGCCCAAGAGGTTGGTGGGGAGTTGCTTTAGAAACACCCAGA TGGCCACGGGAAGCCCAGCAACACTGGGGCTGGTGGAGTGCCTCGGCAG ACCCTGGGAGAAGGTCAGCCCTTGGCTTGAAGCTTATCCTGGCTGTTACA GAGGTTGTGATGGGACACCGGTAGGCCAATGAGCCTGTCATAGGGCTGCT GTCTCCTTTAGCTCCTTAACGGAGTGTGAGGGACCTGGAAGTGTCCATGT CCTCAGCTGAGGTTTAGAGGGGCTAAAGTAGTGGGCCAACATAACTCAAG GGTTAAAGAGCATAAGTGGAGATTTTAAGGGCCGGGGCAAATTTAGGGCT TGGACTCCACAATGGATTCCCTAAGGGATGGACTTCAACAATGGATGCCC TTACCAAATGGGACTTCACAAGTGTCCTTGGTCGTTTTTAAACTAGTTGA TCCCCGGGGCTGAGGAATTTGATTTTAAGCTTTTTGAATCCCCTCACCTT TAAGGGGGGCCCCGGT

>Sequence 934

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> Page 173 of 990 of Table 4

# Table 4

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CCGGGCAGGTACCCTGCAGAATCTACCAAGGCACTCTGTAGCAAAGCAGG CCTTCCACCTGTCTCGGGGAACCCAGCTGGCCACCTTGCACTCAGCCTCT GCCAGTCACCTCAGGGCTGGCATTTGGGAGTCCTGACTGCACGCCAAAGG TTGTTAAGTGGCTTTCTCTGAACTCATTTGAACAGCTGAGTAAACTGTTC TTGCTTTCACAAGGAAAAGAACTCCTGAAGTCATTAGAACTCACCAAACC AGTTTCCTTGTTTTTGAAGAAAGCAGGTAATGTGGCTTTGCCAGCAAGAA GCAAGCCTTGGGCGTCCATCTCCTTCTCAGGTGTGTTTACTCAGGAGAAG GTGACATTTGGATAGGGGCAGGTGTGCTTGCTGAACTGAGCTTCAGTCTA ATCATTCCCGGAAACTTACTGAGACTTTCTCTGCCCTGTAATTCTCCCCC TGTTGATGGAAGTATATTGCAGTCTTATGCAAGACTGTTAAAGGAATGTG ACACTCCCCAGAAAACTTTTTTCCAAAATTTGGGGAACTTCTGGTGCCT ATTTACCTTAAAACTCTTCCCTTAATGAAAATCATTGGAAAGATTTCCCT GGGAAAAAAACGGGCTTTGGTAATGCCAATAACAACGGTGTTCCTAGAA TAACCGGCTTCCCAAGGGCACCTAAAAGGCTAACCCCGAAAAAAGGCGGC CCACCCACATCTAACACTAGTTCGTGCCCTTTTTCTTTGAAATAATTCCA AATCAAAATTAAGTTTTAAAAACCAACAGTTCCCGTTG

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>Sequence 939

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# Table 4

AGAAAATTAAGAGGGGATTATCCTCCCAGTGGAAAACATCTCTTTTTTAT GTCTATAATGTGTC

>Sequence 940

>Sequence 942

>Sequence 943

>Sequence 944

CGGTTCGCTCGGTATGGGGTATTTTTATTTGATTTCCTTTTTAATTATTA TTAGTAATTATGATTTATTTTTTAATACTTTTATATCCGATGTTNNTTAG GTAAAGGGGGAGGCGTGCGTTATCACTCATCT

>Sequence 945

AGGTACGCGGGAAGTCTAAACCTTTTTGACAATACTCACCCTACCCTGGC

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>Sequence 946

>Sequence 947

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>Sequence 948

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> Page 176 of 990 of Table 4

# Table 4

>Sequence 949

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>Sequence 950

>Sequence 951

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>Sequence 953

CCGGCAGGTACAATTITCCTTGTAGTTCTTTTCCTTCAAAGATGAGTAGG
GAAATGGAGATCAGCACATACCATTTGTAATTATACATGTTATAAAACAT
TATTTCCAAAGCCATATGTTACAATAACTCATGTCAGATTCCTTACATTT
CTATTCACTTTTGATGAGCCCATCTTTATCCAAATCCTTATATTTTCTAA
AGAGAATAAATAAGTGGTTACTGAAAATTAATATCACAATAAGTCTTTAA
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ATTGGCAAGTATCCCTCTTCTTGCATATATGTCTTCAAAATAATTGCAAA
CCATTATTCATATATATCTGTGTTATGCTTGCGGGGGGCTTTCTCCCTAAT
TTTATCTGGGCCTATTTATTGAACTACTTATTATACAGATTGAGCATCC
TAATTAGAAAATCCCAAATGCTCCAAAATCCCAAACTTTTCTGAACACTG
ACATGCTCACATTGACCATTTTTAAGATTTAAAAATTTTGGATTATTGCCC
CCCCACCCCCCTGCATTTTTTAAGATTTAAAAATTTGGGAATATCTGAAA
TTTGAATGTTTTGGTCCCAACTGGCTAAATAAGGATCCCCACCCCGGATG

>Sequence 954

>Sequence 955

>Sequence 956

GGGGGACCTCCTCGTCCAAAGAAGGGAAGACCTTGTCGGCACCATTGAGA GGCGTGTTCTCTTCTGGCTGCCGCTCGAGCACCGAGAGCTCCAGCTCGTC TACTGGCTGTGAGGGTTGGGCCAGGTCCATGTGCCGGCAGGGAAAGTCTC CCCGCGTACCTGCCCG

>Sequence 957

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# Table 4

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ACCAGAGGAGGTTCAGTGGCTGGGGAGAGAACCACGGGTCCAAAATGTTG
TGATGCAGGGGACTCAGAGGGTTACATCATTGCTTTAATGATTGCTACATT
GCCTGAGTCTGATACAACAATGAAGGTCAGTTATACACTTGAACTGATTG
CTTATCTAGGACAGTGGGTCTCAACTGGGGGTGATTTTACCCCCCAAAGAT
GACATTTGACAATATCTAGAGACCTTTTGGGTGTCACAACTATTTGGGGA
CCAGGGTTTTTTTTAATGTCTTCTAGTGGAGAGAGGC
>Sequence 958

>Sequence 959

>Sequence 960

AGGTACGCGGGACTGCTCTTTTGTTTATCTAAATTTGGGAATTGTCTGCT
TTATTTCTTCTTATTTTAGAACAAACATTCCAACATTTGAAGTTGCATAA
TCATAAATTTCAACATAGGGGGACAAATATTTACCTGTTCATTTTGTATT
TTTAGTAGAGACAGGATTTCACCATGTTGGCCAGGCTGGTT
>Sequence 961

CCGGGCAGGTACTAAAGAATGTGCATTTATTTGTGGGGAGGAGGAGGAGGT CTAAATAGACAATAAACATATAAATATTAATATTGTGAAAGTGGTATGAA GAAAAATAAAGCATGATAAGGAGAGAGGTGTTCCCTGGCTCTCCAGAG GGCTGAGGTGGAAGAAAAGGACTCCTGTTTTAGGTAAGATATCAGAGAAG ACCTCTCTGATTGACTGAAATGTATGCAAAGGCCTGCATGAAGCCAGGGA CCATGCCGTGCTGACATCTGGGGGAGGACTTATCCTCACAGAGGGGAAAGG AAGTGCAAATGCCGTGAGGTGGGAGGACCATGTTTGGTATGTTCAGGGAG GAACGGGAGGCCCGTGGGGCTGGAGCACGTTCAGCCCTGGGAAGGCCGG ACATCAGACTCAGGAGATTATCGCTGAGATAGCCCACCATCACTAGGCCG ACCTTTATGCATGTTGCTACCTTTGAACTAGCGGATCATCTCATAAAACGC CTTCAACTCTTCCAGGGTTTCCTTCTTGGTGACTGAGTAAACCAGGACGA AAGCGTGGCCCCGAGCTATAACGTGGCGCTGCAAAACCGCGGATGCCGCCC TCACTCTTGCTGCGG

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# Table 4

>Sequence 962

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>Sequence 964

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>Sequence 965

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>Sequence 966

TACAAGTGAGTTTTGAGTCACGATGGGCTTATCGGTAGGATTTCTGGTAG CGAGCGCGGGCACCAGGGCCTCCAAACTTTTTGGACTCGCAGCGACGAGG GTCAGCTACCAGCAGGGTCCGGTCATACTGGATGAGGATGTCTTTGATCT CCTTCTTGGAAGCCTTATCCACATATTTCTGGTAATAGGCCACCAGGGCT TTGGAGATGGACTGACGGATAGCATAAATCTGGGCCACGTGACCACCACC CTTTACACGGCACACGGATG

>Sequence 967

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>Sequence 968

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>Sequence 969

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>Sequence 970

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>Sequence 971

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>Sequence 972

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CCGGGCAGGTACTCATGTCTGTGGAGCAGAGATGCTGACTGGGAATAGAG ACGCTGTCGCTCGACCACGGGCATGGCCTGCGAGGGCCCTGATAAATGGC ATCGGTAGTTTGATGTGGAAACGTGTGCTGGATTTATGCTCTGTATTCAT CCCACTTCTCAGGTTCAACTGCTTTCATCAATTGCCTTCATTTGAACTAC ACCATAAGTTACAAACTCACGTCAATGTAAGGTGTTGTGATTTGCAATCT GAGCAATGATGTTTGACTGTGCCTTGAACCTCAGGATGAAACAAGACATC ATTGATGCAGGCAGTCAACTTTCACTGTAATTGACCAGCATATTATTTAG GCTTTGAATTAATGGTGTCATTAGAATTTGATGACTATTTTAGACCACGG ATACGTGCTACCTATGAGATATGTTTGGGCATTCTTCTAAGGCAAGCAGT GGAGATATTTATGGCACAATACAGGGACAACAAGGATGTATCCCCCAATT TTTCCTAATTACACTTTAAATTTTTTTATTTCATGTGAAACGTTTGGGGG

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# Table 4

AAAACATCTGTATTACATCAAAGTAGTTTATCTTGTGCCTCAATTGATTC TTGAAATCTGCTCTTGGGTTTGCCTGTCTGGCTATCTGTATTTGGGGAAA AAAACAAAAAAAAACGAAAAAAAAGGGTCCTG

>Sequence 974

>Sequence 975

>Sequence 976

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>Sequence 977

>Sequence 978

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# Table 4

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>Sequence 979

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>Sequence 980

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>Sequence 981

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>Sequence 982

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>Sequence 983

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# Table 4

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GCCTGGCCATGTCGTGCTATGAGAGGTTCCTCTATCCATTGGTCAAGGAA
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TTGAGCGAGTCACTTGGCAGAGCCTCTGGTTTCTTTAGGGTTGCTGTAA
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>Sequence 984

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GAACCCGAGATCTATTAAGGCCAGAATAAAAAGCAGGGGATTAGTTTTAA CATGAGATACAATATTCCCGGAGGGAAAAATTTAATTAAAA >Sequence 987

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ACATTTCACATACAGTGAAGAAACTCTTGTTTCAGCATTCTTTTTTTGGGT
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TTCACTTTTGGCGTTTTCTTAGCCTTCACCCATTTACTGTGTAAAAGTTT
TTTCTGGCATTATTATTTTGACACAATCTTCCCACCCCTTTGAGTCATAA
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TCATTCTGTGTTGCTTCTTTACTTGACCGATTTTTTTTAGAACGGGAATTA

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CCTTTAGTTCCCAAGGTTGATTTATATGGGATTTGTGGCCAATACATCC GGGGAGGAAGCCGGAGTGGGCATTATTATGGGGGTATATAATAGGTCTTC TTAGTTTGTTTTTATTTCTCTTTAACTAAGGGTTCTTTTTTTGATTGGCG GGATATTCTGGTAATAATTTCTTCTTTCCAAGGTCGGGGCATTTTCGGTT ATATCTCCAGGCTTTCAAGTGGTTAAAGCGTTCTGGGAACACACTCTTTG TTTTATAAAAGGCCCCCATGAGGGTTTCCTCAACGGAAGTTAACGGGTG GGGGTTTATTTGTTTTTTACCCTTAGGGTTCTTACCCCGCTTACTTG GGCGCTTCCTTTTATATATTATCGCTAAAATTTAAGGGTTTTTTAAAACT

>Sequence 988

>Sequence 989

>Sequence 990

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TTTTTAACAATGAGCAAGGTATCTAAATAATATCCACAGCCGTGGAGTTG
AGGCCAATGCAGAGAGTCACCATCAGGGCAATTCCTAGTGGAGTTGCCCA
GGCAGGGCCATCCCAAGACCCAGACAGTAGGGCCACCAGGGTGCAACT
CCAGGCTGGGAGACCCAAAGGCATGCAACTCCAACACACAAAAATGCAG
CCAGCAATGTGATGAAGTAAGGTTGCCTGGAGCCTNGGGGTCCAACTTC
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>Sequence 991

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# Table 4

>Sequence 992

>Sequence 993

>Sequence 994

>Sequence 995

> Page 186 of 990 of Table 4

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>Sequence 996

>Sequence 998

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>Sequence 999

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GGTGGATTACGTTAGTATTCGCGCTTAGACTTATTTGAGG
>Sequence 1000

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>Sequence 1001

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>Sequence 1002

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>Sequence 1003

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С

>Sequence 1005

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# Table 4

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>Sequence 1008

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>Sequence 1009

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TGGGGCTGGTGTCTCCAGAGTGGTGATGTGAAGAGCAGCACCTCGCTTAG
AGGTAGAGCAGGTGTGGCCATGAGCTCAGGTGATGGCAGTGGAGCTTAC
AGGAGATGGCTTGTGGCTTTTCCCTCCGTTGGTCTGTCACTCTCAGCTGC
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TGAAATCCCAGCACTTTGGAGGCCAAGGCGGACGGATCACTTAAAGCCAG
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GGTGCATGCCTGTAATCCCAGTTACTGGGTGGCTGAAGCT
>Sequence 1011

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# Table 4

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>Sequence 1012

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>Sequence 1014

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GGAACAATGAGAAGGAGAGAATTCTACTGGTCACAGACAAGACTCTCTTG
ATCTGCAAATACGACTTCATCATGCTGAGTTGTGCAGCTGCAGCGGAT
TCCTCTGAGCGCTGTCTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTG

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GGATGTCCCTGGACAAGAGACAAGGAGAAGGCCTTACGATCTACTGGGGG AGTCCGGAGGAGCAGGCTCTTCTGTCCCGCTGGAACCCATGGTCCACTGA AGGTCCTTATGCTACTTTCACTGAGCATCCTATGAAATACACCAGTGAGA AATTCCTTGAAATTTGCAAGTTGTCTGGGTTCATGTCTAAGCTTGTTCCA GCTATCCAGAATGCCCACAAGAAATTCAACTGGATCTGGAAGAGGAAAGA AACTGATGGTGTTAACTGAACCCATTTTGATTGAGACCTACACAAGGCTG ATGTCATTCATTGGGAACCGCAACAAACTTGGCTTTTCCCTTGCCCGTGG GAGTATTGGTTTTTTGAAAATTTTTTTTGGAACTTGCCCGGCGGCCCCGTTTA GAACTAGTGGGATCCCC

>Sequence 1017

>Sequence 1018

>Sequence 1019

>Sequence 1020

>Sequence 1021

CCGGGCAGGTACCCAGCTGAGACTGGCTAAGTCTAATTCCTACCCCACAC

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#### Table 4

>Sequence 1023

>Sequence 1024

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>Sequence 1025

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GTGGCTCCCAGCGGACGGGAATTAGAGACCGCCTGAGAACAGGAAACCTA
CCTCCTCATTTCTGGGTTCCCAGTGTCCTGCCCAGAGCCCATCATGTGG
CAGAAGCTCAGGACGCAAATGTCAGGGGCAGAAGACTAAGTCCTTGCTCT
GGGCAGGGGTCAGGACGTGTGCAGCTCCTTGGCCCAGAATTGTTTCCCT
CCTGCCTCACTCCCTGGTGTAGAATTTTGGCCCAGACGCTCCCTGCCATGT
GACTTGGCAGGAGCTCCCTCTAGAGGAGGGGTAGTGATATAGCTGTAAAT
CTCACGTTGAGGCTGGCCGCGTTGGCTCAAGCCTGGTATCCCAGCACTTT

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# Table 4

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>Sequence 1026

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TGCTCTACGAGGGCTGAGAGCTTGTGGCGGGGTCTCGGTGTGGTGGAGGG
AACACCATCAGTGTGCTGGGGTGTGGGGTAGCAGGTCACCAGGGAAAGGA
AAACAAAGGGGGAAGAAAATAGGGATGTATTGATACATTTGGGGGAAAAC
ACAGCCCTGAGAGAGAATCAAGTGTCTATGTTGGCCCTGAGCAAAAGCGA
TAAATACGTTTGGCTCTTCTGACCCAGAGGTGGCATATGTGGCTGGGAA
TTCTGGTGGAAGTGGCTCATTGTCCATCTCTGGCCCAACTTGAGCCTGGG
TTTTCATCTCTTAGCCCAACCTGGTACCT

>Sequence 1027

>Sequence 1028

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>Sequence 1030

>Sequence 1031

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#### Table 4

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>Sequence 1032

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CCGGGCAGGTACGCGGGCTGCTCTTGTGGCACAGAAGAGGTGCCTGCACC CCTCCCTAGAGTGTTGTTCCAGCTGCCTGAGAACTGCCCCTACAGCCCTA CCAAGGTCACGTCTGCCTCAGAGAGCCTGATCACGGGCTCACCAGACCCA GTCCCACCCAGCTTTGCCCCCTCTAGCCAGCCTTGGGAGCAGAGCATGGG ATGGGACCACTGAGAGCTCCACACCCCCACCCATCACCAAGAACACTCT TGTATTCCTTATCAACAAAGGCCAAGTAAAAATCCCACTGTCATCACTGC AGCTGCCTCTCACCTGCCAGCATCACCTACTGGCCAGGAGGTCAAAACTG CATGTCCTGTCGCAGCAACTGTTGATATCATTGCACAGCACTCAGACAGC TCTTACCTGCAGGCATCACCTGCTGGCCTGTAGGGTGAACTGCACAACCC **AATATAATTCCCTGCTGACAGGTACCTGGGCCGTTCTTAG** 

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# Table 4

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>Sequence 1038

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>Sequence 1039

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>Sequence 1040

AGGTACGCGGGAGATGCTAAGAATCTAGCCATGTAAAAACTCCCAAAACA TCCAAATTCAAAAAAACTGGAATCTAACGTGGTAATGCAGTTGTCAAGAA CACGCAATAGTCTTTGGGCTTTTACAAAGCACTGAAAACTAAATGTTGCA TTTGTGCCCTTATCTTCCACAACTTCTTTCTTGGCAGCTTTTCTTGGCTC ACTTCAGACACAGAGTTTCAAGTAATCAGGGAAAGTTGGGACAGAAAC TTCCTCTGTCTTTCCATGGCCTTTTCTTTTTCCTTTACGGATCTGTGATC CTATGCTTTCTCTCACGTTCACATTATATGTGTCAGTTGGAGAAATCTTG ATGCCCAGTTTCATTTGTTTCTTCTGTCCCACCTGTAACTAATTTAGGTT GAGTTCTCCGGCTCATGTATCAGAGTGTGTATGACAAATTATCTTAAAGC CCAGAGGGCCTCGGTGGTCCAAGTCCCAGCAACAAGGGACACCTGCTGTC ATGACATGGGCTTGACCTGGGTTCTGTGGACATTAAGGAACCACTGTCCT GAGAAGGGGGTATGGAGCTAAACTAGGGGAGGGAGCCAGGTGAGCTTAAA GCTGCCCAGGAAAACGAAAGAGTTTT

>Sequence 1041

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AGGTACTTTAGGAGACCCAGGCGGGCAAATTGCCTGAGGTCAGGAGTTTG AGACCAGCCTGGCTAACATGGTGAAACCCTGTCTCTACTAAAAATACAAA AATTAGCCGGGCATGGTGGCTCACGCCTGTAGTCCCAACTGCTTGGGAGG TTGAGGCAAGAGATCGCTTGAACCCAGGAGGTGGAGGTTGCAGTGAGCC GAGATCGCGCCACTGTACTCCAACATGGGCGACAGAGCAAGACTCCATCT TAAAATTAAAGAAAGAAAGAAACAAAGAAAAGAAAAGCTTTATATTGAAC TTCTCTAAAAAAAGAAAAAAAAGAAAGCCTGATGCACACAAATCTAAATT TTGGCAAGTCGATCAATTAAAGGATATTTATTTGCATCACAAAATAATTC TTTACTCCCCCAAAAATTAATAAAAAGTTCAAATAGCAACTTTTCCTAA TGTGTTTAAAATGTAATCACCAAATTCATGTGTCCCCAACTTCTTTTCAG TTATAATTCTATTGGGTAAAGTGAGGTATCCCTGAAGTGAAGGCAATAAG AGAATTGAGCTTTAGAACTTGCTTGAAAAGACCTGTTCTTTTTTAAAATC CGAGCTCTTTTTCTTGGCTAAACGGCTTTTTGTAAACTTTGTTAACTGG TACCTGGCCGGGCGGCGTTTAAAACTTGGGATCCCCCGGTTTAAAA >Sequence 1042

CTCCACCGCGGTGGCGGCCGCCCGGGCAGGTACCAATAAGATAGTTGTTT AAGACTATAGCTCTCTAAAGAGTAGTCTTTTAAATTTAGAGAATTTCTTT ATCTCATAAGTGACTCAAGCCAAAAAGGCTTTTTTTCATGGAAAGTCCCT GAGGTAACTTTCTGGGTTTAGAATACGACAGGCAAAATTGGCATCTTTTT TTTAAATGGGTGCGAAAGATGCAGCCTTCATGATCCTCCCCAAAATTTAC TCCCAGAAATAAGCTAAGATAGCATATCTCTGTTGCCACAGGCGGTTAAG GATGGTGCAGCTGGTCTCCCTATGAGCACATGGACACGTGGCCACATGGG GGTGCCTCTAGTCACAGACCTGCCAACCTGTGACGCCTGTGACACAGGGC ATGCACTTTAGGGATTAGACTTTCCCAGCACTAACCAGGCAACAAAGATG GAAGCAACAGAAGCCCTTCATGGATAGAACTCCTTTTAGGGACAGACTTC ACTGACAGCTTGGCACAATTTGGGGAGAAAAGAAAGTGCTGCTTAAAAT TGACCTTGAAATTAACACCCCCCGAGGCCGAGACCAAGGGAAAATGCTCC CTCTTGGTTTCAAGGTAACTTTGAAGGGCCTTAGCCAGACAAAAGGGACC CTTATCCGGTTTTATTTAGGGACCAACACACACATTTGTCTAAATTAAAGC CGGTTTGTTGAAAACCTTAAAATTACCCTTTTTGGAGGGTAACTAAAAAC AGGGGCTTTTTAGGGT

>Sequence 1043

> Page 196 of 990 of Table 4

# Table 4

>Sequence 1045

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CATCTCAACGGTGCGTTTATTATATATTNATAAGACTCGTTCCCTTATTTAA ATAAATAAGGGTGCTGTAGTTAATAAAAGATGTTAGTGGTTGTCTTGCTA TNNTAGGACGTGGAGGGTGGAGGAA

>Sequence 1047

>Sequence 1048

>Sequence 1049

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> Page 197 of 990 of Table 4

# Table 4

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>Sequence 1050

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>Sequence 1051

>Sequence 1052

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>Sequence 1053

>Sequence 1054

AGGTACGCGGGAGAGACATTGGAGGGAAGGGAAGGGCTTTTCTCCACACA

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# Table 4

CACCGGTTTCCCTGGAAAAACGTTT

>Sequence 1057

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ATTAGCAAGGACGGGGAAAACTGTAGTGAGTTTGTGTATCAGCCACAAGC
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CAACAGCTTATTTCTTATTCACAATACATGCCTATTGAGGGCTGGTGGGT
CTCTGCTTGTCATTGTCACGTGGGGATGCAGGCTGACGGAGCAGCTACCA
TTGTGAATGCTGCTGGCCGGCATCCAGGAGGCCTAGCAGGTCTCTTACAG
GTAACTGAATGCTCCAGCCCAGAAGTGACAGGTCACTTCCACTCGCAGCT
CATTGGTCAGGACCAGTCACAGGAATCTGCCTAACCTCATGGGCATTTTG
AAATCTCTTCAACTTTTTGAAACTGCTTCAGAGATGCCTCGTATGTGAAG
GCACTGACACCACGTCCTGGGTGCTTTGTGTCCTTAAGGGAATGGCTGAT
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>Sequence 1058

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CACGAGAGAAATCTAAGCGTCTATTGCAGGAGAAACGTCCCTTGCCACTC
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TGCCCTCTTCCCCACCTTTTTTTGGGACCAAGGGAGAAGCCACCTGCAAT
TGTGGGAACAAAGCCTAATTGGTACCCTCGGCCCGCTTCTAGAAACTTAG
GGGATCCCCCGGGCTGGCAGGAAATCCCATATCAAAACTTAATCGAATC
CCGGCCAAACCTGAAGGGGGGGCCCCGGTCCCCAAGCTTTTTGGTACCC
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>Sequence 1060

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>Sequence 1061

>Sequence 1062

>Sequence 1063

>Sequence 1064

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# Table 4

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>Sequence 1065

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AGGTACTTNNNAAAATTTTTTTTTTTTTTCGGCAACTACCTCCCGGGTTC GGGAGGGGTAATTGGCGCCCCTGTTGCCTTCCTGGGATGGGGGTAAACT CGTTTTCTTCAGGGCTTCCCTTCTCCCGGAAATCCAAACCCCTGGATTCC CCCGTCACCGTGGTCAACCATGGTAGGCAACGGCGACTACCATCGAAAG TTGATAGGGCAAGACGTTCGAATGGGTCGTCGCCGCCCCCGCGTACCTGC CCG

>Sequence 1067

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>Sequence 1069

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#### Table 4

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>Sequence 1070

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>Sequence 1071

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>Sequence 1072

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CCTCTTACTGTCTAATGTTTCCAGTGGCACAGGGACAGATTCATTTGGGA
ATCCCTGGGCCCAGTGTCCCAGGAAGAAACCCACAGTTGAGCCTGGAGTG
ACTGTCCTCTGATTCTCACACTTACCGTTTCCTGGGGCTCCTCATCTTCA
ACACGGTGACCAGCGTGAAGAAACAGAGCCTGCCCCCTACAGACTATCAT
TTAGAGGGAGTTTATTTCTAGTGTCCTTCAGACCCGCCCAGTACCTGCCC
G

>Sequence 1073

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# Table 4

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>Sequence 1074

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# Table 4

TAAAATAAAAAACAAAAAATCCCGGTTTGGGGTGTCCCTGTGTTTGGACC CCAATTTTGGGGAGGGTGAGGGGGGGATACCCCCCCCCAAGGTTTAGGG TCCAATGGGTTTGATGGTTTTTTGACAAAAAAAGAGCCTTTTTAAAAAAA AAAAAAAT

>Sequence 1077

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>Sequence 1078

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>Sequence 1079

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>Sequence 1080

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#### Table 4

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>Sequence 1081

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>Sequence 1082

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>Sequence 1083

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# Table 4

>Sequence 1085

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>Sequence 1086

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>Sequence 1087

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>Sequence 1088

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ATCGTCTTTCTGACATTTAATGTTTTTAAAAAGGATGACAAGGACAGTTC
CCTTGGGAAGTCATTTCAGTCACGACCTGCTGTGTATCTGTGGAGTTGAC
ATGTTCTGCATAGTTGAGTGCTCCCCTGCTCTGGGAAGCCTGCACGGGGT
CCCTGCACACATCCCAGCATGGAGGGTCTCAGGGCTTGGTTTGAGACGAA
GGTGGGCGAAAGGTTCACATGAACTGAGGTCATGACAGAGTGATCAGGTG
GGACCAGGCAGAACTCTCGGCCCCCAGGGCTTGCTGGTACCTGCCCG
>Sequence 1089

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>Sequence 1090

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>Sequence 1091

>Sequence 1092

>Sequence 1093

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>Sequence 1094

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TTAGCAAAAATGAAATTCTAGGTGTGGGAGACAGGTAATTTAAACTAATA
TTGATTGGGATTCTGTCTCAGTGAGTTGATATTCAGGAGCTTGTTTTATG
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TAAAAAAGTAGGCAGATTTGGAGGCTGTTTATAATTCTATATTTTGTGAA

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#### Table 4

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>Sequence 1096

>Sequence 1097

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>Sequence 1098

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#### Table 4

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>Sequence 1099

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CAAAATGTTTGCACTAACTCCATAGATTCATGTCTGAAGGATTAGATACT
CCAGGAACATCTATTGGGAGAAAGTTTAACTACAACTGTTGTCCATTTTT
CAATTAATGTGCCAGTCACTAATCAAAAAAACAGATGCTGTCGTTTTCCT
CATCCACTACTTGGGACACCTAAAGATAGATGGACAGATACTTAAGAGGC
TGCCTCCTTCTTCTGAGATAGGGCTTTTCATCAGGGCTGTGCCACAGGGT
GTGATGCTGTGTGATAGCAGATGGCTCTCCTTCATGCCCATTACTTTTTG

>Sequence 1100

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AAAAGAATGTGGGATAGAAGAGACATTGCGGTCAAGAGGTGGTGTGAA
GTTTGAAAGTTCTGTTGCCAAACATATGCAACTCTCATTCAAGAGAAAAA
CAATCTGCAAAGACTTTGAAGAATGAGAGAAACATGATTCTTAGGAGCAG
GCTTTCAGATTCTCGATGATGGATCATGTAGACGCAGATATTATCCAGC
AAAATCAGGATAATTCCTGAGTCGGAGGCTGCATTCCAGCCTCTATGTCC
CAGGCTGGAGCAGTGGCAGGATCTCAGCTCATTGCAACCTCTGCCTCCCG
GGCTCAAGCAATCCTACTATCTTGGCCTCCCGAGTAGCTGAGACTACAGG
TGTGTGCCACT

>Sequence 1101

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GTTGAAGATGAGGAGCCCCAGGAAACGGTAAGTGTGAGAATCAGAGGACA
GTCACTCCAGGCTCAACTGTGGGTTTCTTCCTGGGACACTGGGCCCAGGG
ATTCCCAAATGAATCTGTCCCTGTGCCACTGGAAACATTAGACAGTAAGA
GGGGTGGGCTGTTCTGAAGGGTCTTGCATCGCACAGTGGACACTGAGTGTG
CAGAATTAAGAGAAAGGAGAAAATGGCCATTGAGTCGAACTTCAGGATGA
ACCAGTATTTTAATAAAGCTTATGTTGATGATTAAAGTCTGCCCGCGTAC
CT

>Sequence 1102

>Sequence 1103

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TCCAAAACAAATAAGATAGTAAAGCCATAAGAACAGCACTTGTATGCTTT
TTGTATTCTAAGAATATGAGAAAAATGATTTCAGTGAACCTTTATCTGAA
AGGATATAACCATGTCCTGATGGAATACTGCGATGGCCAGGTAGAAGGGA
ATGAGATGGGCCAGGCGCAGTGGCTTACGCCTGTAATCCCAGCACTTTAG
GAGGCCGAGGCTGGCAGATCAGAAGGCCAGGAGTTCAAGACCAGCCTGGC
CCGCATGGTGAAACCCCGTCTCTACTAAAAAAAAATACAAAAAATTAGCTG
GGCACGGGGGCATGCGCCTGTAATCCCAACTACTCGGGAGGCTGAAGCAG

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GAGAATCGG

>Sequence 1104

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>Sequence 1105

>Sequence 1106

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TTCTGGAGAGACCATTCAAGGCTTCTGGCTCTTGGCAAAGATAGACCACT
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ATCTGCAAATACGACTTCATCATGCTGAGTTGTGTGCAGCTGCAGCGGAT
TCCTTTGAGCGCTGTCTATCGCATCTGCCTGGGCAAGTTCACCTTCCCTG
GGATGTCCCTTGACAAGAAACAAGGGGAAGGCCTTATGATCTACTTGGGG
AGGCCCGAAGAGCCATCTTTTTTTGCCGGCTTGAACCCATGGGCCACTGG
AAGTCCCTATGCTCCTTTTACTGAGCCTTCTATGGAATACACCCCCGGGA
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>Sequence 1107

>Sequence 1108

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>Sequence 1109

>Sequence I110

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# Table 4

PCT/US01/00798

GAAAAATAAAGCATGATAAGGAGAGAGAGGTGTTCCCTGGCTCTCCAGAG GGCTGAGGTGAAGAAAAGGACTCCTGTTTTTAGGTAAGATATCAGAGAAG ACCTCTCTGATTGACTGAAATGTATGCAAAGGCCTGCATGAAGCCAGGGA CCATGCCGTGCTGACATCTGGGGGAGGATTATCCTCACAGAGGGGAAAGG AAGTGCAAATGCCGTGAGGTGGGAGGACCATGTTTGGTATGTTCAGGGAG GAACAGGGAGGCCCGTGGGGCTGGAGCAGGTTCAGCCATGGGAAGGCCAA AGATGAGATCAAAGAGAATAGTGGGAGATCACGTAGAGATTTATGGGCCA TTGTGAGG

>Sequence 1111

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>Sequence 1112

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>Sequence 1113

>Sequence 1114

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>Sequence 1115

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CCTCCTCCTCCCCACCAGGCCTGTGTCTCCCCCCAAAAGGCAAAAGA
GGCACCAAACACCCCAAGCCCAGGTCAGGAGCCTCCCATCCCTCAGAACTC
CCTTCCCCTAGGAAGCAGATCACAGAAATGGGGTGGGCCTGGTGGCTGTT
CAGAAAGTCCCAGGCCCCTGAGAGAGAGGGCTCTATTGTGAAGCCATTT
AGCTCTTCCCAACACTCATCACTGCTGCATTTATCTAGGCCATATCTAAC
ACATACCACTGGGGATCCTAGGGCTAGGCACTGCGTGGAGCCAAAGGGAA

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#### Table 4

CGTGGCCTCACACCCAAGGAGATCCAAGTCTGATGCAGAAGGCCCCGCCTCATTTCTTAGGTCTGAG

>Sequence 1116

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>Sequence 1118

CCGGCCAGGTGCCTCAGAACAGTGGACTCAGAATTGAGGGTTGGGGCAGA ATTTGAGAACCACTGGTTTGGATAAACCAGAAAGAATTAAAATTATAAAAC TGACATTGAGGAGGTAATCTGTGAGAGAAAAGTGAGCTTGCTATCCACAC ACACCTTCTGGCAAAAATCTGAAAAAATATAACTGAGGAACAGGAACAAC ACTGGCTAACAGAGAGACAAACATTCCTTTCAGGATCCTATGGGAACTAC TTACCTTCTCCAGACATTTTCTTAGGAGTTCCACTGCCCTCTCACTTGAG ATAGTCCGGGTGTAGTTATCGGTCGAGGATACTGAAAGTCAGGAAGGCCC CATAACCCGGGGCTTGAAAAAGGGCCTTGGCCCAAGGTTGCCCCGTAGTC CATGTAAAACAGCACTGGGCCTTTATGTTCATCATTAGCCGGCAAGAAGG AGTTAACCTTATATGGGGCCCACTCCCAAAACATTAACCCGGTTTCGCCT TTGAAGTTAACTCTTCCCGGGGAGAACCATTATTTTCCTTTTTCACCTAA TTAAAGGGCCCTTTTTTTGAATATATTCTGCAAATTGGCCCTGGGCCCTT TTAAAACTATGGGTCCCCGGGGTGCAGGAAATCAATTCAAGTTTATGTT ACCGGTAACCTTAAGGGGGGC

>Sequence 1119

>Sequence 1120

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# Table 4

>Sequence 1121

>Sequence 1122

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>Sequence 1125

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# Table 4

>Sequence 1126

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>Sequence 1127

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>Sequence 1128

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>Sequence 1129 >Sequence 1130

>Sequence 1131

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ATAGACACTTGATTCTCTCCAGGGCTGTTTTTCCCCCAAATGTATCAA
TACATCCCTATTTTCTTCCCCCTTTGTTTTCCTTCCCTGGTGACCTGCT
ACCCCACACCCCAGCACACTGATGGTGTTCCCTCCACCACACCGAGACCC
CGCCACAAGCTCTCAGCCCTCGTAGAGCACAGGCCCCACCCTGAAAGTTG
GCAGAGCACCGGGCTATCAAGCTGTGTCATGTGGAGCCAGCAGCACCGGC
ACAACCGTGGATCCCGGGTACCTGCCCG

>Sequence 1132

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>Sequence 1133

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ACCTGTTAAGTGACTTACTCCACAGGAACTACTTAATGGCTGGTCCCTGA
TAGACTGGGAACTCCATGAGAGCAGGGGTGGGGGGGCTCATTTGTCCTTGT
GACCCCGGCACTCTATGCTTAGTTGAACGAATGCTGGATGGGCTGATGCG
GGCGGTGTCCTCTTTCCCTTGCAATCAACTGGAACAGGGTGGGAGGG
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>Sequence 1134

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